Sustainability and biofuels: Reconciling social and environmental criteria with WTO law

Lydgate, Emily

Awarding institution:
King's College London

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Emily Barrett Lydgate

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Dickson Poon School of Law
King's College London

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Abstract

This thesis examines European Union ('EU') biofuels sustainability criteria in the context of the law of the World Trade Organization ('WTO'). The criteria were introduced as part of the 2009 EU Renewable Energy and Fuel Quality Directives. There has been no dispute; however, uncertainty about the criteria's WTO-compatibility has inspired a number of legal analyses concluding that they are not compliant. Whether or not there is the political will for a dispute, it is interesting to consider sources of potential non-compliance. As they pursue 'sustainability,' the EU criteria are well positioned to prompt larger questions regarding the relationship between international trade rules and sustainable development, described by the WTO Secretariat as a central WTO principle.

The thesis identifies a core challenge: dispute settlement mechanisms to identify *de facto* discrimination risk including regulations that exhibit particular characteristics. EU criteria exemplify these characteristics, which also seem likely to apply to sustainability regulation more broadly. These include breadth, complexity and process-orientation, and response to emerging environmental problems. Thus, the criteria may be perceived as protectionist even though this is not their intent. The larger implication is that, despite its centrality in principle, applying sustainable development through national regulation raises particular challenges of WTO law.

The Appellate Body must strike a balance between achieving the WTO's primary mandate of trade liberalization and showing appropriate deference toward trade-restrictive regulations, particularly those, like EU criteria, that pursue climate change mitigation and other important social and environmental objectives. While this case study suggests a potential imbalance in favour of trade liberalization, the Appellate Body may redress this without major structural reform, as relevant WTO provisions have a range of interpretation, and dispute settlement outcomes continue to evolve.

Contents

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Chapter 1

Introduction

1. Introduction

To help prevent climate change, governments worldwide have passed a raft of national regulations to encourage or mandate increased use of biofuels as a substitute for petrol for transport. Yet biofuels occupy the unique role of being seen as both an environmental solution and an environmental problem. Thus, for governments who have encouraged increased production, ensuring that this benefits environmental goals is a complex challenge. As a response to this challenge, the European Union ('EU') has developed criteria for sustainable biofuels as part of the same regulations that encourage biofuels use: primarily the Renewable Energy Directive ('RED') and also the Fuel Quality Directive ('FQD').[1] These criteria, still being implemented by EU Member States, entered into force in December 2010. They aim to capture biofuels' potential benefits, such as lessening carbon emissions and revitalizing agricultural markets. At the same time, they attempt to minimize potential harms associated with biofuels production, principally biodiversity loss, and to ensure that biofuels have low greenhouse gas emissions, so that they do not contribute to the problem they aim to address. Crucially, these sustainability criteria apply to both domestic and also imported biofuels.

This thesis examines EU biofuels sustainability criteria in the context of the law of the World Trade Organization ('WTO'). With growing biofuels markets, international trade is also increasing.[2] To facilitate market access, trade liberalization of biofuels has become a key objective of the current Doha Development Agenda ('DDA') negotiations for countries such as Brazil, who have the potential to supply

[1] European Council Directive 2009/28/EC of the European Parliament and of the Council on the
[2] P Spackman, 'Massive increase in global biofuel production', *Farmer's Weekly*, 12 October 2009, http://www.fwi.co.uk/Articles/2009/10/12/118291/Massive-increase-in-global-biofuel-production.htm (visited 1 August 2012); 'Biofuels, trade and sustainability', *EurActive*, 28 April 2008, updated 29 July 2009, http://www.euractiv.com/trade/biofuels-trade-sustainability-linksdossier-188459 (visited 14 September 2012).

much of the world with cheaper, more energy efficient biofuels.[3] Some exporters have indicated that EU sustainability criteria, rather than a conservation strategy, may constitute 'green protectionism': a market access barrier erected to restrict imports and drive up their costs. For example, in 2006 it was estimated that complying with some of the EU proposed sustainability criteria would increase ethanol production costs in Brazil by 36-88 per cent.[4]

The criteria have led to informal complaints due to their trade-restrictiveness. In 2007, a report on WTO negotiations stated that 'Brazilian trade diplomats have warned their EU counterparts that they would reject any standards placed by buyers on bioethanol and biodiesel, and would bring such attempts to the WTO for dispute settlement due to their trade impacts'.[5] More recently, Malaysian and Indonesian government ministers promised to investigate the possibility of a WTO dispute against the EU as the criteria unfairly excludes their palm oil from the EU market.[6] The American Soybean Association has also pressured the United States Trade Representative to challenge the WTO-legality of the criteria.[7] In June 2012 the government of Argentina argued that Spain's implementation of sustainability requirements for biodiesel violates WTO law.[8]

Whether a WTO dispute will arise is an open question, particularly as sustainability criteria remain a work-in-progress, and the European Commission ('EC') have saved some of the most controversial elements for last. They are still formulating regulation to respond to indirect land use change, defined later in the introduction.[9] Also, they are debating the introduction of additional criteria on air, soil or water protection.[10] Finally, they have yet to clarify the definition of biodiverse

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[3] See Section 2(d).
[4] E Smeets, et al., 'The Sustainability of Brazilian Ethanol – An Assessment of the Possibilities for Certified Production' (2006) Copernicus Institute at Universiteit Utrecht and Universidade Estadual de Campinas.
[5] 'Biofuels: The New Trade Frontier?' 11(2) *Bridges*, International Centre for Trade and Sustainable Development ('ICTSD'), 2 April 2007, 1.
[6] 'Malaysia seems possible WTO case against EU palm oil limits', 14(18) *Bridges*, ICTSD, 19 May 2010; P Harrison, 'Malaysia, Indonesia warn EU hampers palm oil trade', *Reuters*, 16 November 2010, http://af.reuters.com/article/energyOilNews/idAFLDE6AF14C20101116 (visited 13 June 2012).
[7] 'ASA Expresses Concerns about EU Renewable Energy Directive to USDA and USTR', Press Release, American Soybean Association, 9 March 2011, http://www.soygrowers.com/newsroom/releases/2011_releases/r030911.htm (visited 15 November 2011).
[8] 'Argentina raises a specific trade concern at the WTO regarding Spain's biodiesel measure', *Trade Perspectives,* Frantini Vergano, European Lawyers, Issue no. 12, 15 June 2012.
[9] RED, above n. 1, at Art. 18(9); see Chapter 4 of this thesis for an in-depth analysis.
[10] Ibid at Art. 18(9b).

grasslands.[11] Their responses to these unresolved issues will also influence the likelihood of a dispute.

With respect to existing criteria, uncertainty about their legality has inspired analyses from trade policy experts.[12] For the most part, these have determined that some areas of the criteria fall into a WTO gray area, and may not be WTO-compliant. One particularly critical report, for example, has concluded regarding sustainability criteria that 'even a cautious analysis suggests the RED would not stand up to examination by the standards required by WTO rules'.[13]

Whether or not there is the political will to bring a dispute, it is instructive to consider potential sources of illegality. The European Commission ('EC') has made historic claims for their criteria, describing them as 'the most comprehensive and advanced binding sustainability scheme of its kind anywhere in the world'.[14] These criteria are an ambitious and unprecedented attempt to legislate sustainability at the national level. For its part, the WTO has stated that sustainable development is a central WTO principle.[15] The WTO-compatibility of the criteria thus has implications for the mutual supportiveness between WTO rules and national sustainability regulation more broadly.

It is these larger trade questions, rather than the criteria *per se*, that form the focus of this thesis. For example, what does this case study demonstrate about the role of the WTO in shaping, and responding to, EU environmental regulation? From the perspective of dispute settlement, how should the WTO strike the balance between enforcement of trade liberalization commitments of its Member States and deference

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[11] Ibid at Preamble para. 69. See Section 2(E) for further discussion of this issue.
[12] *See, eg,* F Erixon, 'The Rising Trend of Green Protectionism: Biofuels and the European Union', European Centre for International Political Economy, Occasional Paper No. 2, 2012, http://www.ecipe.org/publications/rising-trend-green-protectionism-biofuels-and-european-union/ (visited 13 July 2012); R Howse, et al. 'WTO Disciplines and Biofuels: Opportunities and Constraints in the Creation of a Global Marketplace' (2006) IPC Discussion Paper, International Food and Agricultural Trade Policy Council; A Lendle and M Schaus, 'Sustainability Criteria in the EU Renewable Energy Directive: Consistent with WTO Rules?' (2010) ICTSD Information Note No. 2, http://ictsd.org/i/publications/86798/ (visited 1 August 2012); A Swinback, 'EU Support for Biofuels and Bioenergy, Environmental Sustainability Criteria, and Trade Policy', ICTSD, Programme on Agricultural Trade and Sustainable Development, Issue paper no. 17, June 2009; A Swinbank, 'Presidential Address: EU Policies on Bioenergy and the Potential Clash with the WTO' (2009) 60(3) *Journal of Agricultural Economics* 485 – 503; S Switzer and J McMahon, 'EU Biofuels Policy – Raising the Question of WTO Compatibility' (2010) UCD Working Papers in Law, Criminology and Socio-Legal Studies Research Paper No. 26/2010, University College Dublin.
[13] Erixon, ibid at 27.
[14] Communication from the Commission on the practical implementation of the EU biofuels and bioliquids sustainability scheme and on counting rules for biofuels, OJ 19.6.2010 C 160/8, Section 1.
[15] Available on the WTO website at http://www.wto.org-english-tratop_e-envir_e-sust_dev_e (visited 1 August 2012).

to their trade-restrictive policy objectives? What kind of challenges do the particular characteristics of sustainability regulation pose with respect to WTO law? These are the central questions this thesis considers.

This investigation is timely as the EU's renewable energy directives that include sustainability criteria are at the vanguard of national regulations aimed at preventing climate change. While some criticize these climate-change-related regulations as a rise in green protectionism,[16] they may also be seen as essential for no less than saving humanity, particularly if a strong international regulatory framework cannot be successfully negotiated. This debate will continue to be one of the most interesting in defining the relationship between trade liberalization and climate change regulation.

Determining whether sustainability criteria protect EU markets or imperiled environmental resources is also significant with respect to the global standoff regarding the liberalization of agriculture in the DDA. Developing countries in the global South have a comparative advantage in biofuels production, while wealthy Northern countries, such as those of the EU, protect their biofuels industries. WTO developments regarding biofuels sustainability criteria thus play into this central controversy of current WTO negotiations.

Biofuels are a complex topic, in part because their role in the public imagination, policies for their production and use, and even the technologies to produce them are all in flux. To help orient the reader in the short but complex history of the ambivalent public embrace of biofuels, Section 2 of this introduction provides a general introduction, including an overview of the sustainability controversy surrounding biofuels production and the specific problems to which the EU criteria respond. Section 3 focuses on the potential for trade conflict. It argues that biofuels sustainability criteria themselves do not constitute green protectionism, but rather the EU's attempt to respond to political backlash to their biofuels targets. Section 4 provides a summary of the criteria. It then outlines the thesis' main themes, structure and scope.

2. Biofuels sustainability criteria and international trade law

[16] *See, eg,* Erixon, above n. 12, at 3 – 5.

A. Biofuels: definitions

First generation biofuels come from feedstocks that have either high sugar/starch content (bioethanol), or high oil content (biodiesel). Bioethanol, known simply as ethanol, is fuel alcohol. It is created by fermentation; thus, the more sugar a crop has, the more efficiently it can be converted. Main crops from which ethanol is produced include sugarcane and sugar beets, as well as grains such as corn, cassava and wheat. To create blends of more than 10 per cent, it is necessary to use a flex-fuel engine, which can run on any combination of ethanol and petrol.

Biodiesel is a vegetable oil- or fat-based diesel fuel, which requires the use of engines that run on diesel fuel. Production is often sourced from rapeseed, sunflower seed, soybean, palm or jatropha oil. Biodiesel can also be blended with conventional diesel fuel; up to 20 per cent blends require no engine conversion.

Second generation biofuels promise to provide an environmentally superior option. Rather than being derived from sugar- or oil- rich crops, they are made from cellulose or lignin, which comes from the woody parts of plants. They can thus be made from the entire plant, or even agricultural waste products. The development of these biofuels relies upon advanced enzymatic fermentation technologies. While they are too expensive to be commercially viable, some estimates suggest that they may become available as early as 2015.[17] Other highly energy-efficient options such as biofuels derived from algae[18] and even human waste,[19] are also currently in the research and development stage.

The imminent availability of second generation biofuels has been acknowledged within climate-change related agreements. EU biofuels targets, for example, will be revised to higher numbers once cleaner biofuels become available.[20] The timing of the introduction of second-generation biofuels adds greatly to the uncertainty of biofuels' long-term sustainability impacts. Given the low production levels of second generation biofuels, this thesis focuses on the first generation biofuels currently being produced to fulfil EU biofuels targets.

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[17] 'Sustainable Bioenergy: A Framework for Decision Makers', UN-Energy (April 2007) 14.
[18] *See, eg,* 'Algae for production of biofuels', European Bioenergy Platform, http://www.biofuelstp.eu/algae.html (visited 16 July 2012).
[19] M Sapp, 'Ghana launches human waste to biofuels project', *Biofuels Digest*, 30 May 2012, http://www.biofuelsdigest.com/bdigest/2012/05/30/ghana-launches-solid-waste-to-biofuels-project/ (visited 16 July 2012).
[20] RED, above n. 1, at Article 23(8a).

B. Panacea or peril?

Biofuels burst onto the public policy stage in a blaze of optimism. The potential of biofuels to provide a major source for fuel for transportation generated tremendous commitments worldwide. The private and public sectors in major economies such as Europe, India, China and the United States have united in their advocacy of ambitious biofuels use targets, ranging between 5 per cent and 25 per cent of total domestic fuel use by 2020.[21] To meet this demand, between 2000 and 2008, global biofuels production multiplied fourfold; it is projected to almost double between 2012 and 2021.[22] In 2009, it was estimated that only one tenth of biofuels produced were traded.[23] However, with global markets growing, international trade is increasing.

The EU Renewable Energy Directive ('RED') requires, as a binding commitment, that 10 per cent fuel for transport should consist of renewable energy. The EU changed the wording of its target to 'renewable energy' from 'biofuels', which it used in earlier legislation. However it is estimated that 5.6 – 8.8 per cent of this target will consist of biofuels.[24] Producing these biofuels will require between 4.5 – 7.9 million additional hectares of land to come into production.[25] The conservative estimate corresponds to a land-area the size of Denmark.[26]

The EU's Renewable Energy Directive also specifies that imports will play a role in supplying biofuel, in particular ethanol.[27] Private sector activity confirms this

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[21] T Harmer, 'Biofuels Subsidies and International Trade Law, Annex 1: Selected Biofuels Measures in Major Producing Countries', ICTSD Global Platform on Climate Change, Trade Policies and Sustainable Energy, June 2009, 17.

[22] 'Position Paper on Biofuels for the ACP-EU Energy Facility', EuropeAid (2009) 2; Organization for Economic Cooperation and Development ('OECD') and UN Food and Agriculture Organization ('FAO'), 'Agricultural Outlook Summary 2012 – 2021', http://www.oecd.org/site/oecd-faoagriculturaloutlook/ (visited 1 August 2012).

[23] Harmer, above n. 21, at 2.

[24] P Al-Riffai, et al., 'Global Trade and Environmental Impact Study of the EU Biofuels Mandate', International Food Policy Institute for the Directorate General for Trade for the European Commission, Final Report, March 2010, 11 (5.6 per cent estimate); C Bowyer, ' Anticipated Indirect Land Use Change Associated with Expanded Use of Biofuels and Bioliquids in the EU – An Analysis of the National Renewable Energy Action Plans', Institute for European Environmental Policy, March 2011, 2. (8.8 per cent estimate).

[25] There is some discrepancy about the amount of land conversion required to meet the EU's targets. The larger estimates are from Bowyer, ibid at 2; the smaller are from 'EU finds biofuels and politics don't mix', *Reuters*, 5 July 2010, http://uk.reuters.com/article/2010/07/05/uk-biofuels-europe-idUKTRE6641G020100705 (visited 1 August 2012).

[26] Reuters (ibid) averaged the estimates of fifteen different reports, including those commissioned by the European Commission, to arrive at the figure of 4.5 million hectares, an area approximately the size of Denmark; K Richter, 'Scrap Biofuels Targets and focus on improved public transport,' *Guardian*, 10 February 2010, www.guardian.co.uk/environment/2010/feb/10/biofuels-travel-and-transport (visited 1 August 2012).

[27] RED, above n. 1, at Article 16.

commitment. For example, in 2010, Royal Dutch Shell, Europe's second biggest energy company, formed an £8.19 billion Memorandum of Understanding with COSAN, a Brazilian ethanol company, to double existing production.[28]

Yet this massive private sector investment and public sector support coexist with a parallel dialogue calling for biofuels targets to be scrapped entirely. Biofuels have proven to be perhaps the most controversial and divisive of proposed climate change measures. Is producing more biofuels essential to stopping climate change? Or is their production more likely to harm than help?

The case *for* biofuels states that their production revitalizes agricultural markets worldwide. Biofuels rely upon simple, well-established technologies, and already form a fuel component in many countries. Thus, they can be incorporated cheaply and easily into existing infrastructure, and present an immediate strategy to fighting global warming. At the same time, biofuels provide jobs and investment opportunities, and increase domestic fuel security.

Some initially presented biofuels as a panacea. Ted Turner, Chairman of the United Nations Foundation, proclaimed in 2006 that biofuels produced from food crops have the potential not only to embody the goal of sustainability, but also to solve the current stalemate in international trade negotiations. This argument rests on the logic that governments could redirect their subsidies from agriculture to biofuels. Biofuels provide more global markets for agricultural production, thus alleviating any surplus.[29]

Other advocates included Richard Branson, the founder of Virgin Atlantic airlines, who stated that Brazil alone can grow enough ethanol to power the world's commercial aircraft, thus resolving concerns about the climate cost of rising levels of air travel.[30] Robert Birgeneau, the Chancellor of University of California at Berkeley, which received US $500 million toward biofuels research in 2007, pinned

[28] N Mathiason, 'Shell to do deal with Brazilian biofuel producer Cosan to secure future', *Guardian*, 2 February 2010, http://www.guardian.co.uk/business/2010/feb/01/shell-cosan-brazil-biofuel-deal (visited 1 August 2012).
[29] M Sell, et al. 'Linking Trade, Climate Change and Energy,' ICTSD, Issue briefs: November 2006, 16; DA Motaal, 'The Biofuels Landscape: Is There a Role for the WTO?' (2008) 42(1) *Journal of World Trade* 83, 61 – 86.
[30] EF Vencat, 'Developing Alternatives: Interview with Virgin CEO Richard Branson', *Newsweek International,* 16 July 2007.

humankind's hope for the future on the ability of biofuels to combat global warming, stating that it is our generation's 'moon shot'.[31]

Yet the growing case *against* biofuels cites negative effects of the expansion of intensive agriculture: environmental problems such as deforestation and wetland degradation (themselves drivers of climate change), excessive water use, and polluting runoff. Biofuel crops, many of which are themselves important food staples, displace other agricultural crops, or compete with food crops, and drive up prices, with the potential to increase world hunger and deforestation of threatened ecosystems. Further, biofuels producers have been criticized for purchasing large amounts of land in developing countries, displacing indigenous people and threatening national sovereignty in a practice commonly known as land grabbing. Biofuels have also been critiqued for other human rights abuses such as poor labour standards.

For these reasons, a global army of nongovernmental organizations and advocacy groups has called for a ban on biofuels use targets. A call to action on the Climate Change News Digest website reads 'If we want to save forests, prevent catastrophic global warming, and stop food prices rising beyond the reach of poor people, then we need to stop biofuels from large-scale monocultures'.[32]

Rising prices of agricultural commodities in 2008 attracted broad-based criticism of biofuels. A leaked World Bank study reported that biofuels were responsible for a 75 per cent increase in food prices.[33] This 'food crops versus fuel crops' controversy brought biofuels critique into the mainstream. There is growing consensus that biofuels do not represent a straightforward answer to mitigating global warming. Rather, they pose another problem: how to eliminate negative impacts of increased production.

More moderate critics suggest, rather than scrapping biofuels targets altogether, that these negative environmental and social impacts, grouped under the umbrella of 'sustainability', must be well regulated. These critics have included international organizations such as the United Nations Environment Programme and

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[31] Eds, 'The Tree of Wisdom: Nobel Laureates of the University of California at Berkeley', *Vanity Fair* Green Issue, 4 April 2007.
[32] *See*: Climate Change News Digest, http://www.climatechangenews.org/action.html (visited 1 August 2012); Biofuel Watch, http://www.biofuelwatch.org.uk/ (visited 1 August 2012).
[33] A Chakrabortty, 'Secret report: biofuel caused food crisis', *Guardian*, 3 July 2008, http://www.guardian.co.uk/environment/2008/jul/03/biofuels.renewableenergy (visited 1 August 2012).

the UN Food and Agriculture Organization,[34] the interdisciplinary, international Global Bioenergy Partnership,[35] and NGOs that represent negatively impacted stakeholders and ecosystems, such as Conservation International, the Worldwide Fund for Nature (WWF), the World Conservation Union (IUCN) and Oxfam International.[36] These organizations have focused on the need to foreground sustainability concerns in the establishment of biofuels as a global energy strategy.

C. Shades of green

Understanding sustainability impacts of biofuels is complex, for several reasons. First, they seem to bring into conflict separate environmental goals: biodiversity loss versus climate change mitigation, for instance. Second, though we know that biofuels provide an overall impetus for increasing farmland in production, the specific circumstances of this production differ greatly. In fact, a more relevant question than *whether* biofuels should be produced is *how* they should be produced. Corn-based ethanol has faced more criticism, for example, than sugarcane-based ethanol, due to its higher emissions levels. Second generation biofuels, though not yet commercially available, promise to be much 'greener' than these. Regional differences in growing areas, and the quantity of production, also determine the sustainability of biofuels.

Third, from a scientific perspective, research on sustainability is complicated not only by the diversity of production circumstances, but also the recent scale increase in production and a high degree of uncertainty in the variables required to produce quantitative analysis. Also, in demarcating particular areas for conservation, the EU must rely upon definitions that may be politicized or controversial. Defining wetlands, for example, or quantifying high biodiversity levels, is notoriously difficult.[37]

Finally, the amount of increased production will also depend upon changing technologies and market fluctuations. A 2006 *Science* article concluded that 'many

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[34] 'Liquid Biofuels in Transport: Conclusions and Recommendations of the Scientific and Technical Advisory Panel (STAP) to the Global Environment Facility (GEF)', GEF/C.31/Inf.7, 21 May 2007. *See also*, É. Santana, 'Director do Pnuma elogica açoes brasilieras de meio ambiente', *Agencia Brasília*, 6 March 2007.

[35] Global Bioenergy Partnership, http://www.globalbioenergy.org/ (visited 15 July 2012).

[36] 'Biofuels Roundup: Sustainability at Stake' 7(8) Trade BioRes, ICTSD, 27 April 2007.

[37] 'Life and Europe's Wetlands: Restoring a Vital Ecosystem' (2007), European Commission DG Environment, 3; 'Sustainable Trade and Poverty Reduction: New approaches to integrated policy making at the national level', United Nations Environment Programme (UNEP, Geneva: 2006).

important environmental effects of biofuel production are poorly understood'.[38] A March 2010 report on the environmental impacts of the EU biofuels mandate, commissioned by the EC Directorate General for Trade, also stated that 'as is common in this new field of enquiry the study's findings are subject to uncertainties because of gaps in available data and the lack of complete empirical validation'.[39]

D. Specific sustainability impacts

This is not to say that sustainability concerns are unverifiable. In spite of these gaps in knowledge, it is certain that the use of first generation biofuels as a primary source for the world's fuel would have a dramatic impact on the global agricultural landscape, simply because of the quantity of land required.[40] The next section provides a brief overview of one specific environmental problem associated with biofuels production: biodiversity loss, which EU sustainability criteria attempt to address. This overview focuses on two places already infamous for biodiversity loss from deforestation: Brazil and Borneo, the latter an island divided among Indonesia, Malaysia and Brunei. These countries are world leaders in the production of ethanol and biodiesel, respectively, and have embraced ambitious production targets.

The issue of deforestation-driven biodiversity loss is important not just as an end in itself, but also because, as some scientists have cautioned, biofuels production may actually increase greenhouse gas emissions, due to land conversion. It has been estimated that converting rainforest, peat lands or savannah to produce biofuels based upon food crops will result in 17 – 240 times more carbon dioxide emissions than would be the case if these biofuels simply displaced fossil fuels.[41]

When examining biofuels and deforestation, Brazil is a good place to start. Already the 'Saudi Arabia of biofuels',[42] Brazil is positioning itself to supply much of the world with its sugarcane-derived ethanol. Brazilian exports of ethanol for 2007 were just over 3 billion litres. A 2007 study commissioned by the Brazilian Ministry of Science and Technology put export estimates for 2025 as high as 200 billion

[38] A Farrell, et al., 'Ethanol Can Contribute to Energy and Environmental Goals' (2006) 311 *Science* 506.
[39] Al-Riffai, et al., above n. 24. For quote, *see*: http://trade.ec.europa.eu/doclib/press/index.cfm?id=542 (visited 1 August 2012).
[40] S Pacala and R Socolow, 'Stabilization Wedges: Solving the climate problem for the next 50 years with current technologies' (2004) 305 *Science* 968.
[41] J Fargione, et al., 'Land Clearing and the Biofuel Carbon Debt' (2008) 319 *Science* 1235.
[42] 'Food price swing prompt calls for biofuels reform; Brazilian ethanol imports surge', 15(7) *Bridges*, ICTSD, 11 May 2011, http://ictsd.org/i/news/bridgesweekly/106219/ (visited 16 June 2012).

litres.[43] This is an over 60-fold increase in exports in fewer than twenty years. Such dramatic estimates have proven unrealistic; a combination of poor harvests, high sugar prices and the rising value of the Brazilian currency has meant that Brazil has been *importing* ethanol from the United States.[44] Nonetheless, this figure is impressive for what it reveals about the extent of national ambition regarding the growth of domestic and global demand. The longer-term forecast is for an increase in Brazil's production and export of ethanol, though not at the ambitious rates originally forecast.[45]

Brazilian ethanol is often represented as one of the greenest possible first-generation biofuels. The *Economist* went so far as to describe sugar-derived Brazilian ethanol as 'good,' and corn-derived US ethanol as 'bad'.[46] This distinction results from the fact that it is estimated that sugarcane-based ethanol is around 7-8 times more efficient than corn-based in its production of greenhouse gas emissions.[47] Thus it resolves one of the most recognized controversies about ethanol: its fuel efficiency. While some analysts have questioned whether *any* comparative advantage in fuel efficiency arises for corn-derived ethanol, no such controversy has arisen for sugar-derived ethanol, as it is clearly superior to petrol.

Yet there are concerns about the ecological cost of all this production. Brazil is also a world leader in agriculture-driven deforestation. It is possible that biofuels will lead to an increase in deforestation in important areas for absorbing carbon dioxide which have suffered huge biodiversity loss, such as the Amazon rainforest.

E. The cerrado: hinterland or biodiversity hotspot?

The Amazon is the epicenter of concern about biodiversity in Brazil. It is also a region in which sugarcane does not grow particularly well. Instead, much expansion of sugarcane for ethanol is occurring in the cerrado, a grassland ecosystem which occupies about a quarter of Brazil, more than 1.2 million square miles. It spans the centre of the country, and has the highest level of plant diversity of any savannah

[43] E Winfield, 'Briefing No. 6: Ethanol on Brazil', *University of Iowa Center for International Finance and Development*, May 2008, http://www.uiowa.edu/ifdebook/briefings/docs/brazil.shtml (visited 3 March 2010).
[44] ICTSD, above n. 42.
[45] OECD and FAO, above n. 22.
[46] 'Ethanol: fuel for friendship – America and its neighbours discover a common interest', *Economist,* 1 March 2007.
[47] A Farrell, et al., above n. 38, 506.

ecosystem in the world, including many endangered species.[48] Following the system of designation developed by Conservation International, it is considered a biodiversity hotspot. Conservation International also states that this region is being deforested faster than the Amazon, with ethanol as a major driver.[49]

The cerrado is an ethanol frontier. Consortiums of North American investors, such as Brazil Agrilogic, focus on the productive potential of the cerrado areas in the state of Mato Grosso do Sul to attract international interest.[50] The American financial speculator George Soros, for example, has invested a billion US dollars in three large ethanol factories in this state.[51] A presentation by the president of Datagro, a top ethanol consulting firm, at the International Symposium on Alcohol Fuels in Brazil in 2006, clearly identified ecosystems considered too valuable for expansion: the Amazon, the highly endangered Atlantic Rainforest along the Southeast and central coast, and the Pantanal, the largest wetlands ecosystem in the world. Datagro's presentation emphasized that intensification, as well as expansion into non-valuable ecosystems, would easily meet the growing demand for ethanol consumption. It provided an overview of the 100+ new mills, being built in areas which are not included within the three specific areas that should be protected.[52] This presentation allowed for large increases in production in the cerrado, a prime non-valuable ecosystem.

Other advocates echo this approach of dividing productive from ecologically valuable areas. Checkbiotech, a website devoted to biotechnology, notes that 'of Brazil's 851 million hectares of land, 405 million (48 per cent) correspond to the Amazon forest or legal natural forest reserves….' After analysing the remaining components, the website asserts that 'the remaining 90 million hectares are cerrado (savannah), which is available to increase sugarcane planting'.[53] Similarly, an article in the *Economist* stated: 'For the past three decades, sugarcane plantations have been spreading north and west across Brazil's hinterlands, replacing coffee, citrus and

[48] EA Castro and JB Castro, 'Ecosystem Structure in the Brazilian Cerrado: a vegetatation gradient of aboveground biomass, root mass and consumption by fire' (1998) 14 *Journal of Tropical Ecology*, 263-283.
[49] S Valle, 'Losing forests to fuel cars: Ethanol sugarcane threatens Brazil's wooded savannahs', *Washington Post*, 31 July 2007.
[50] 'Biofuels: Ethanol in Brazil', Brazil Agrilogic (2006). Brief for potential investors.
[51] 'Os desafios do álcool', *Jornal da Cana*, reprinted from *Globo Rural*, 13 July 2007.
[52] P Nastari, 'Brazil's Capacity to Meet Future Ethanol Demands', Power Point Presentation, *International Symposium on Alcohol Fuels XVI* (2006) Brazil.
[53] T Rideg and M Smith, 'Brazil's ethanol: big potential', *Checkbiotech,* 15 May 2007.

pasture….Ultimately, Brazil would like to see ethanol traded as freely and widely as oil'.[54] The 'hinterland' described is the cerrado; the term makes clear that there is no ecological cost for this ambitious vision. In this framework, it is possible to manage expansion of ethanol by drawing boundaries which separate valuable from nonvaluble ecosystems.

Brazil's cerrado is either a hinterland well suited to solving the world's energy crisis or a crucial ecosystem teeming with species imperiled by this very activity, depending on the source. Within the global imagination, a pro-conservation imperative clearly has emerged for the Amazon, but has not been established in the cerrado.

For this reason, the EU's as-yet undetermined definition of biodiverse grasslands in its sustainability criteria is crucial and controversial. If the cerrado is included in this definition, it will have a detrimental impact upon Brazilian exports to the EU. This may increase the likelihood of a WTO dispute.

There is also the problem of indirect land-use change. Even if the Amazon rainforest is established as a no-go zone, it will still be impacted by ethanol production elsewhere in the country. A boom in sugar production means that other agricultural activities, such as soy farming and cattle ranching, are being displaced. These are prime drivers of Amazonian deforestation. Soy can also be converted to biodiesel, another expanding market in Brazil, adding more incentive to expand soybean production. Due to the combination of these factors, growing agricultural production for biofuels increases the incentive to farm in the Amazon.

F. Borneo: Further deforestation in an already threatened ecosystem

Biodiesel production in Borneo presents similar problems. Due to its high oil content, palm oil is amongst the best sources of biodiesel from the perspective of greenhouse gas emissions savings. Nonetheless, deforestation in Borneo, to make way for palm oil plantations, has been one of the most high-profile sustainability controversies associated with biofuels production (moreso than in Brazil, a situation which, as documented above, divides commentators).

Borneo, an island divided among Indonesia, Malaysia and Brunei, consists mainly of an Indonesian region known as Kalimantan. It has been claimed that

[54] 'Ethanol: fuel for friendship – America and its neighbours discover a common interest', above n. 46.

Borneo is being deforested at a rate unparalleled in human history.[55] The forest is being cleared both legally and illegally, to sell timber and make way for agricultural land, including palm oil plantations. The cheapest vegetable oil on the market, palm oil is found in many common household items in Europe, such as biscuits, soap, margarine and crisps. The majority of EU imports of vegetable oil consist of palm oil; 90 per cent of this came from Indonesia and Malaysia.[56] Palm oil is also a prime source for biodiesel.

Even before the introduction of international targets to increase biofuels use, deforestation to make way for palm oil plantations had prompted international concern. Palm oil plantations support far fewer species than native forest. The International Union for the Conservation of Nature estimates that the numbers of orangutan have decreased by 50 per cent in the last few decades, due to habitat loss from deforestation.[57] Further, the draining of peat bogs to make way for palm oil, and the burning of virgin forest, has led to vast amounts of trapped methane and carbon emissions being released into the environment. As a result, Indonesia is now the third largest emitter of greenhouse gases, behind America and China.[58]

Despite its contribution to climate change, the Indonesian government has developed ambitious plans for biodiesel development in Borneo, requiring vast additional areas of cultivation. It is estimated that 12 million acres of land, in Borneo and elsewhere, will be dedicated to companies growing biofuel crops, such as palm oil, cassava or sugar cane. As in Brazil, the financial potential of this biofuels cultivation is attracting major international investment. For example, the Chinese state-owned offshore oil corporation has invested in a new deal to develop biofuels plantations, estimated to be worth US $5.5 billion.[59]

To respond to concerns about rampant deforestation, as well as human rights abuses, a consortium of stakeholders, such as NGOs, palm oil producers, and government representatives, have formed the Round Table on Sustainable Palm Oil

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[55] P Kirby, 'EU promises sustainable plant fuel', *BBC News*, 14 January 2008, http://news.bbc.co.uk/1/hi/world/europe/7187606.stm (visited 1 August 2012).
[56] J Siddle, 'Palm oil's carbon benefit queried', *BBC News*, 2 December 2008, http://news.bbc.co.uk/1/hi/sci/tech/7758542.stm (visited 1 August 2012).
[57] 'Orang-utan survival and the shopping trolley', Panorama: Dying for a Biscuit (web article), *BBC News*, 22 February 2010, http://news.bbc.co.uk/panorama/hi/front_page/newsid_8523000/8523999.stm (visited 1 August 2012).
[58] Ibid.
[59] L Williamson, 'Indonesia's push for biofuels', *BBC News*, 1 February 2007, http://news.bbc.co.uk/1/hi/world/asia-pacific/6320285.stm (visited 1 August 2012).

('RSPO'), a certification scheme that forms a precedent for the Roundtable on Sustainable Biofuels, discussed later in the thesis. However, it is estimated that only 3 per cent of palm oil is currently certified as sustainable.[60] Indonesia is also the first country to implement a legal framework for the REDD, a UN scheme which aims to provide incentives to developing countries to maintain forests for the sake of carbon capture.[61]

The Indonesian Biofuels Development Board claims that new plantations will expand only onto unproductive land, which has been deforested and then abandoned. However, this policy may be difficult to enforce. Companies have a built-in incentive to deforest land, as they receive more money from selling the timber. According to the BBC, the Duta Palma group, one of the biggest corporations producing palm oil, is itself logging illegally on high conservation lands and deep peat lands.[62] Thus, illegal logging does not just happen at the fringes of the industry, but at its very centre.

G. EU Sustainability Criteria

Due to these and other sustainability concerns, biofuels have formed a source of controversy within the EU. There are those who support biofuels, and argue against sustainability criteria. Biofuels provide a significant boost to EU agricultural markets, and create rural development. French sugarbeet ethanol producers and EU automobile manufacturers, for example, both exerted influence to establish and maintain targets and incentives for biofuels production, the latter in order to counterbalance some of the other, more punitive aspects of the RED.[63] Yet, while there may be industry support for biofuels production, there is also industry pressure to avoid cumbersome regulations. Also, due in part to WTO rules, formulating and adopting sustainability standards is risky and complex: a political headache.

On the other side, some high-level ministers in EU governments, even those that also embraced biofuels targets, have expressed strong reservations. In 2006, for

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[60] 'Orang-utan survival and the shopping trolley', above n. 57.
[61] FE Satriasanti, 'Indonesia Merging Deforestation Rules to Spur Carbon Trading', *Jakarta Globe*, 24 March 2010, http://www.thejakartaglobe.com/news/indonesia-merging-deforestation-rules-to-spur-carbon-trading/365664 (visited 1 August 2012).
[62] 'Orang-utan survival and the shopping trolley', above n. 57.
[63] 'EU Report Questions Conventional Biofuels' Sustainability', *EurActiv.com*, 11 April 2012, http://www.euractiv.com/climate-environment/eu-report-questions-conventional-news-512076 (visited 8 June 2012.

example, the then Danish Minister for transport and energy stated that first generation biofuels from food crops were not ethical.[64] Other governments, such as the Netherlands, Germany and the UK, independently established sustainability criteria before official EU criteria existed. Nor has the sustainability criteria ended the controversy. In early 2010, a leaked document between senior agriculture and energy officials in the EC stated that, if the full carbon footprint was taken into account, it could 'kill' biofuels' role in the EU.[65]

Sustainability criteria have evolved through several versions, more and less stringent, with input from different EU bodies. These criteria represent the EU's attempt to respond to controversies about negative impacts of biofuels by establishing a framework for discrimination.

H. The criteria

a) Overview

Biofuels sustainability criteria were introduced in two Directives released on 23 April 2009. The first, the RED, stipulates that by 2020, 20 per cent of energy overall will come from renewable sources, including 10 per cent of energy for transport, the main source of which will be biofuels. Article 17 provides sustainability criteria to govern how these biofuels must be produced.[66]

The second, the FQD, specifies that greenhouse gas emissions for transport fuels must be reduced by 6 per cent by 2020, and provides sustainability criteria in its Article 7. The overall purpose of the FQD is to reduce pollution and cut down on greenhouse gas emissions in the transport sector. It requires that fuel suppliers must reduce emissions through use of biofuels or other alternative fuels, or through a reduction of flaring and venting at production sites.[67]

Both RED and FQD criteria apply equally to domestically produced and imported biofuels. Following them is voluntary. However, compliance is necessary in order for biofuels to count toward the renewable energy target of the RED or emissions reduction target of the FQD. To reach alternative energy targets, the RED

[64] Swinback, 'EU Support for Biofuels and Bioenergy, Enviromental Sustainability Criteria, and Trade Policy', above n. 12, at 2.
[65] R Harrabin, 'Harrabin's notes: Battle over biofuels strategy', *BBC News*, 10 March 2010, http://news.bbc.co.uk/1/hi/sci/tech/8559661.stm (visited 1 August 2012).
[66] For simplicity, the paper will refer only to 'biofuels'; however, sustainability criteria also apply to bioliquids.
[67] FQD, above n. 1, at Preamble, para. 9.

encourages the introduction of domestic support, such as investment, tax exemption and direct price supports. It also specifies that biofuels must comply with sustainability criteria to qualify for these domestic support schemes.[68] This thesis focuses primarily on the RED, as its ambitious binding targets met through national incentives make the likelihood for trade conflict regarding sustainability criteria greater. The FQD also uses the RED criteria as its reference point.[69] As the provisions are equivalent, the summary below uses the RED as a reference.

The criteria set thresholds with regard to both overall efficiency of biofuels, and also what type of land can be used in their production. The latter includes restrictions on land with high biodiversity value or high carbon stock. The specific requirement of the EU regarding greenhouse gas is as follows: biofuels must represent an emissions savings of 35 per cent, rising to 50 per cent in January 2017, and 60 per cent in January 2018 for installations in which production started from 2017 onwards.[70] (There is a grace period, until 2013, for installations in operation before 23 January 2008.) The RED specifies that these savings should be calculated as the sum of: emissions from extraction and cultivation of raw materials, land-use change, processing, and transport and distribution. Emissions that result from the end use of biofuels, however, are not included, as these are considered to be equivalent to the carbon captured by biofuels crops. The RED provides default emissions values for various biofuels, which can take the place of case-by-case calculations.

The RED identifies categories of land with high biodiversity value, as well as high carbon stocks, from which raw materials for biofuels should not be taken, based upon the land's status in January 2008.[71] Regarding biodiversity, this includes primary forest, nature protection areas, and highly biodiverse grassland. Regarding high carbon stock, raw material should not be taken from wetland, continuously forested areas, areas with 10-30 per cent canopy cover, and peat land. An exception can be made if it can be proven that cultivation did not involve drainage of previously undrained soil. Evidence can be provided in various forms, including satellite images and site surveys.[72]

[68] Ibid at Article 5(1); Article 17(1).
[69] FQD, above n. 1, Preamble, para. 10.
[70] RED, above n. 1, at Art. 17(2).
[71] Ibid at Art. 17(3).
[72] Ibid at Art. 17(4).

The EU's definition of biofuels includes liquid and gaseous fuels for transport, derived from biomass.[73] This encompasses not only bioethanol and biodiesel but also biogas. Gaseous fuels, or biogas, result from anaerobic digestion of animal wastes, food wastes and dedicated crops.[74] The RED also includes mechanisms for encouraging the use of second-generation biofuels from waste products, which are environmentally preferable to biofuels produced from food crops, such as corn, soy and palm oil. Such biofuels count double toward the renewable energy target.[75] Also, the only criteria applicable to waste or recycled fuels is that pertaining to greenhouse gas emissions.[76]

While social criteria were not included as a factor conditioning imports, the RED creates a biennial reporting requirement for the EC, to be monitored by other EU bodies. The report will address social impacts of biofuels in countries supplying the EU. These will include the relationship between biofuels and food crops; in case of negative impacts on food prices or production, 'corrective action' can be proposed.[77] The criteria also specify that the Commission will state whether supplying countries have ratified certain provisions of the International Labour Organization (it also contains this requirement for the Cartagena Protocol on Biosafety and the Convention on International Trade in Endangered Species).

b. Compliance and implementation

To show compliance, Member States must require major suppliers to provide the relevant national authorities with data that show conformity to the EU targets. Whatever information they submit must also be independently audited. Alternatively, they can use a 'voluntary scheme' that the Commission has recognized, or the terms of a bilateral or multilateral agreement between the EU and a biofuels exporter. This system is based upon conformity assessment; the EU must approve each voluntary scheme. While the RED does not contain instructions for verification for compliance to sustainability practices, but relies upon 'existing control mechanisms' of the

[73] Ibid at Article 2 (i).
[74] Swinback, 'EU Support for Biofuels and Bioenergy, Environmental Sustainability Criteria, and Trade Policy', above n. 12, 1-2.
[75] RED, above n. 1, at Art. 21(2).
[76] Ibid. at Art. 17(1).
[77] Ibid. at Art. 17(8).

Member States, it also clarifies that if there is a breach of the requirements under this area, the Member State will need to account for it.[78]

The RED stipulates that criteria must be implemented by December 2010. While the majority of Member States have taken measures or are in process of doing so, in late November 2011, the EC formally requested France and the Czech Republic to bring their national renewable energy legislation in line with EU rules through implementing biofuels sustainability criteria.[79]

The burden is upon Member States to determine how to meet the binding alternative energy targets set out in the RED. To comply with the RED's targets, Member States have adopted diverse approaches to increasing the contribution of biofuels toward fuel for transport. These include production incentives such as investment or tax rewards and penalties, and consumption incentives such as tax measures and use mandates. For example, countries including Ireland, Hungary, Poland and Romania have opted to reduce excise tax on biofuels. Countries including Germany, the Netherlands, Spain and Romania have set blending requirements, so that all petrol has a stipulated percentage of added biofuel. Other countries, such as Finland, Greece and Sweden are investing in the production of biofuels. Many Member States have adopted some combination of these approaches, or are undertaking internal political processes to bring them about.[80]

I. Too much regulation, or not enough?

Critics of the criteria seem to be divided into two camps: those who think it goes too far and those who think it does not go far enough. In the former camp are exporting countries and some trade law analysts, who argue that the regulation creates obstacles to trade and represents EU protectionism. These concerns will be examined in detail in the following sections. Yet many NGOs have complained that the criteria will do nothing to prevent some of the major harms of biofuels. In the words of formerly quoted Climate Change News Digest: 'The EU are now consulting on 'sustainability standards'. We believe that what they propose will offer no protection to rainforests,

[78] Ibid, at Art. 2(1): 1-3.
[79] 'Renewable Energy: France and Czech legislation still not in line with EU rules', Press Release, European Commission, 24 November 2011, Ref IP/11/1446.
[80] This overview is drawn from 'EU-27 Biofuels Annual', Annual Report 2009, Global Agricultural Information Network, USDA Foreign Agricultural Service, Annex 1.

the climate, nor people.'[81]

One major critique is that they don't contain strong social criteria. Perhaps the most infamous result of biofuels production is the rise in prices for food crops. However, food security is not a binding criterion. The criteria do not address other human rights issues for which biofuels production has been criticized, such as their role in 'land grabs', in which private companies from wealthy developed countries buy vast quantities of agricultural land in developing countries.[82]

Further, there are concerns that the criteria will not achieve what they *do* intend: prevention of biodiversity loss and mitigation of climate change. One problem is that they do not address what may be its biggest source: indirect land-use change. As the Brazilian example demonstrated, increasing biofuels production has impacts on land use which go beyond the areas in which the biofuels crops are planted. More specifically, EU regulation may actually encourage deforestation by contributing to the overall land area in production and encouraging other crops, not bound for EU markets, to be grown in these areas. To prevent this perverse incentive, the EC is now attempting to formulate regulation to respond to indirect land use change.[83] However, the complexity of the problem means that crafting an effective regulatory response is difficult and scientific assessments have been highly contested.[84]

Another critique is that criteria miss the main issue: scale of production. It is no coincidence that sustainability concerns have arisen with global targets for increased use. It may just not be possible to provide enough (first generation) biofuels to supply global targets without negative environmental impacts. Thus the criteria are thus unlikely to satisfy biofuels' more radical critics. These critics insist that, given the extensification/intensification that will result from current production targets, regulating a sustainability solution, no matter how stringently, will not address the core problem.

3. Trade concerns and EU biofuels policies

A. Agricultural market protectionism and biofuels

[81] *See* Climate Change News Digest, above n. 32.
[82] 'Land and Power: The growing scandal surrounding the new wave of investments in land', Oxfam Briefing Paper, 22 September 2011, 20.
[83] Chapter 4 provides a detailed overview of this topic.
[84] *See* Chapter 4, Section 2.

Complaints about sustainability criteria echo general admonitions that the EU protects its biofuels markets with domestic support measures. The EU applies tariffs to imported biofuels and awards subsidies to domestic producers. These support measures reflect the fact that the EU is not well positioned for biofuels production. The comparative advantage lies in other countries, specifically tropical countries of the global South.[85]

In the biodiesel sector, the EU currently has the largest global production, with Germany, France and Spain in the lead.[86] It is predicted that 70 per cent of EU biofuels feedstock will be produced domestically, the majority in the form of biodiesel.[87] However, to respond to export opportunities, not only Malaysia and Indonesia, but also Thailand, India, Brazil, Paraguay and Indonesia, among others, are investing in increased production. These countries enjoy the advantages of year-round production and cheap land and labour. Argentina and South Africa are also significant exporters.[88] Tropical countries such as Brazil also clearly have the advantage in ethanol production.

Biopact, an initiative of academics and public and private sector, sets out an energy platform for the next decade that 20 per cent of the fuel needs of OECD countries could be met from the global South, by creating the equivalent of 18 Brazils. Thus 'rivers of fuel' will run from South to North, creating the 'best trade deal in history.'[89] The same article quotes Claude Mandil, former Director General of the International Energy Agency: 'If the US and Europe are serious about biofuels, they must turn to the South for their supplies.'[90]

Supporters of the Biopact, and other advocates of increasing South to North trade, have criticized market protections against biofuels. If the free market were to dictate, the EU would find itself an importer of biofuels. One economic analysis concluded that without import duties, 100 per cent of EU ethanol would consist of

[85] A Walter et al., 'Perspectives on Fuel Ethanol Consumption and Trade' (2008) 32 *Biomass and Bioenergy* 730, 745.
[86] 'WTO Disciplines and Biofuels: Opportunities and Constraints in the Creation of a Global Marketplace', above n. 12, at 7.
[87] Lendle and Schaus, above n. 12, at 4.
[88] DA Motaal, above n. 29, at 83.
[89] J Mathews, 'Biofuels: what a biopact between North and South could achieve' (2007) 35 *Energy Policy,* 3550.
[90] Ibid.

imports. This report also estimates that, under a free market model, 50 per cent of biodiesel would be supplied by imports.[91]

Though the EU has indicated that it will increase trade in biofuels, it would still like to maintain a market share. One major political justification for the embrace of biofuels was the desire to support domestic agricultural markets, and provide more energy independence. Therefore, it seems unlikely that the EU will quickly abandon market protections.

In this sense, biofuels are closely entwined in the fate of the Doha round itself. As agricultural products, they promise to revitalize markets and create rural development. Biofuels represent a market worth billions of pounds. But who will get the benefit: developing countries or market-protected biofuels from the EU?

B. Green offence not economic defence

The justification of sustainability criteria for biofuels is that they reflect universal, rather than domestic, priorities: protection against environmental harm. However, market-based objectives may be an important subtext of this seemingly extra-market value. Some critics have claimed that their primary purpose is not to help the environment, but to block (or at least complicate) imports.[92] They provide an excuse for Europe to protect domestic agriculture, despite strong international pressure to open markets and reduce obstacles to trade.[93]

On their face, the RED, the FQD and their sustainability criteria do not discriminate between domestic and imported biofuels (*de jure* discrimination). Yet discrimination can also result from the measure being applied in such a way that it negatively impacts imported more than domestic products (*de facto* discrimination). Determining the presence of *de facto* discrimination involves going beyond the text of the measure, to determine whether its 'real' purpose is protectionism, rather than what is written.

However, if the RED was crafted to benefit domestic producers at the expense of foreign ones, it is doing a poor job. In fact, thus far it has had a pronounced

[91] MK Gueye, 'Linkages between Biofuels, Trade and Sustainable Development', Power Point Presentation. United Nations Environment Programme – ICTSD, 17 June 2009, ictsd.org/downloads/2009/06/moustapha-kamal-gueye.pdf (visited 1 August 2012).
[92] F Erixon, 'Green Protectionism in the European Union: How Europe's Biofuels Policy and the Renewable Energy Directive Violate WTO Commitments', European Centre for International Political Economy, Occasional Paper, No 1, 2009, 2.
[93] Ibid at 13.

detrimental impact on domestic biodiesel. While renewable energy targets have increased demand for biofuels, this has led to higher levels of imports of biodiesel such as palm oil, cheaper than domestic biodiesel. It is estimated that biodiesel imports increased by 21 per cent between 2010 and 2011.[94] As a result, EU biodiesel plants are operating below capacity and many have closed.[95]

It could be argued that, even if the RED's impact thus far has not been protectionist, its intent was. This conclusion is complicated by the fact that the RED specifies that the EU needs more imports, particularly of ethanol.[96] The rationale is explained in a 2010 report on land-use impacts of biofuels trade, commissioned by the EC Directorate General of Trade. One of the main findings reads: 'Trade opening will further improve the emission reduction performance of the EU's biofuels policy, mainly because we would import considerably more emission-efficient sugarcane-based ethanol from Brazil.'[97]

This does not rule out the possibility that national implementation of targets will be discriminatory; for example, a country might try to meet biofuels targets by illegally subsidizing domestic producers. Yet in creating a larger EU market for biofuels, the RED has thus far benefitted foreign producers.[98] An EC communication stated that 'from a trade perspective, the EU maintains significant import protection on some types of biofuels….If it would appear that the supply of *sustainable* biofuels to the EU is constrained, the EU should be ready to examine whether further market access would be an option to help the development of the market.'[99] [Emphasis added] While committing to increased levels of imported biofuels, the EU has been clear that these should be sustainable. Critics of the criteria's trade restrictiveness would argue that the latter commitment complicates the former.

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[94] M Hogan and I Sekularac, 'Analysis: EU biodiesel plants fear closure as imports surge', *Reuters*, 15 November 2011, http://www.reuters.com/article/2011/11/15/us-biodiesel-europe-analysis-idUSTRE7AE0GJ20111115 (visited 11 June 2012).

[95] 'EU likely to curb Indonesian palm biofuel imports', *Business Recorder*, 27 November 2011, http://www.brecorder.com/agriculture-a-allied/single/624/183/1255684/ (visited 11 June 2012).

[96] RED, above n. 1, at Article 16.

[97] Al-Riffai, et al., above n. 24. For quote, *see:* http://trade.ec.europa.eu/doclib/press/index.cfm?id=542 (visited 1 August 2012).

[98] M Schaus and A Lendle, 'The EU's Renewable Energy Directive – Consistent with WTO Rules?', (2010) Trade Law Clinic, Graduate Institute of International and Development Studies, Geneva, Switzerland, 12.

[99] Communication from the Commission to the Council and the European Parliament, 'Renewable Energy Road Map, Renewable energies in the 21st Century: building a more sustainable future' Commission of the European Communities, 2007a:2007, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52006DC0848:EN:NOT (visited 14 September 2012).

The fact that the EU has suggested their sustainability criteria are effectively (if not technically) a condition of import explains why they have faced such scrutiny as a disguised protectionist measure. This thesis will further document aspects of the criteria that have been criticized as *de facto* discriminatory, such as the calculation methodology for greenhouse gas emissions savings and the restriction of imports from ecosystems more common in foreign countries. Against these criticisms, however, it is important to bear in mind that the criteria also have a negative impact on domestic producers. EU biofuels are not inherently cleaner with respect to the EU's own requirements. On the contrary, the EU has identified more ethanol imports as a 'greener' strategy. Many EU biodiesel producers will struggle to meet emissions savings requirements when they are raised to 50 per cent in 2017, while palm oil (produced with methane extraction) will still qualify. In fact, despite being one of the crops most heavily regulated by the EU's land-use criteria, palm oil imports are increasing at the expense of domestic biodiesel, as stated above.

Rather than green protectionism, it seems more likely that the sustainability criteria respond to controversy accompanying biofuels targets. With respect to these targets, EU bodies have found themselves in a problem of their own devising. Alongside industry pressure for biofuels, there has been increasing criticism from both the public and the governments of EU Member States regarding environmental benefits of biofuels and the motives for incentivizing for their use.[100] At the heart of this criticism is the fact that the production of biofuels is part of climate change prevention strategy. EU consumers are subsidizing biofuels through some domestic support measures, due to their environmental benefits. If biofuels are encouraged for this reason, they should provide significant emissions savings over petrol, and be produced in a manner that does not create environmental collateral damage. However, this is not achievable without further guiding the production of biofuels. The criteria thus attempt to rectify a poorly thought-out environmental policy.

This is not to say that the EU does not want to protect its domestic producers. Indeed, it has been suggested that it is likely that the EU will introduce additional

[100] See Chapter 4, Section 2. As an example of internal rebellion, the Netherlands has reduced domestic biofuels blending targets due to uncertainty about the sustainability of biofuels. 'EU-27 Biofuels Annual', above n. 80, at 38.

domestic support measures.[101] However, sustainability criteria themselves respond to a different set of pressures.

The thesis analyses in depth the complex question of whether sustainability criteria are protectionist. Yet despite the risk of oversimplification it is useful to set out in the introduction the general argument that sustainability criteria are not protectionist in intent. This has important implications for the thesis as a whole. It suggests that trade conflict between the criteria and WTO does not stem from their discriminatory nature. Instead, this thesis argues that these challenges result from their particular regulatory characteristics and the trade law challenges they pose. As further discussed in the next section, these characteristics, which also exemplify the concept of 'sustainability', include the criteria's breadth, complexity, extra-territorial impacts and emphasis on methods of production.

4. EU biofuels sustainability criteria and WTO law

A. Balancing: the unifying theme

The central theme of the thesis is the process of balancing. Simply put, in the event of a dispute, the WTO Appellate Body ('AB') must balance the ability of Member States to pursue their regulatory objectives, such as having their biofuels produced sustainably, against their WTO commitments to liberalizing trade. This theme is important on a conceptual and also a more technical level. The next chapter demonstrates how the concept of balancing frames the thesis as a whole. It argues that sustainable development in principle consists of a balancing process between its components: environmental conservation, social welfare and economic development (often equated with trade liberalization in the WTO context). As EU criteria pursue sustainability, this concept of balancing is helpful in understanding the challenges that they pose with respect to WTO law.

The rest of the thesis focuses on balancing in a more technical sense. The main provisions considered are GATT Articles III and XX ('Article III' and 'Article XX') and the TBT Agreement Articles 2.1 and 2.2 ('TBT 2.1' and 'TBT 2.2'), due to the important role they would likely play in a dispute. The AB Report of *US – Clove Cigarettes* articulated the importance of balancing to these provisions:

[101] *Business Recorder*, above n. 95.

> *…the object and purpose of the TBT Agreement is to **strike a balance** between, on the one hand, the objective of trade liberalization and, on the other hand, Members' right to regulate…."*[102] *[Emphasis added]*

They clarified that:

> *'[this balance] is not, in principle, different from the balance set out in the GATT 1994, where obligations such as national treatment in Article III are qualified by the general exceptions provision of Article XX.*[103]

Balancing is of central importance not only to the concept of sustainable development but also the process of determining whether national regulations comply with WTO law through these core WTO provisions. The thesis focuses on the judicial mechanisms by which the AB strikes this balance.

Balancing is also a controversial concept. Enabling the AB to determine the relative importance of trade and non-trade goals is politically undesirable. They do not wish to establish norms, or be empowered unduly to determine the legitimacy of a Member State's regulatory choices. The underlying concern is that, if they are thus empowered, the balancing process will not be balanced. Instead there will be a hierarchy of values, with trade liberalization on top. Empowering a trade organization to determine the legitimacy of non-trade goals is obviously problematic.[104]

Thus, the AB has repeatedly made clear that the level of protection a Member State desires will be respected, as long as they achieve this goal by the least WTO-inconsistent means reasonably available. This approach avoids questioning the validity of a government's regulatory goal in itself, but instead focuses on the means by which it is achieved.

To this end, the WTO has also repeatedly affirmed the freedom of Member States to pursue established aims of human and environmental welfare. For example, the AB stated in *US – Gasoline*:

> *WTO Members have a large measure of autonomy to determine their own policies on the environment (including its relationship with trade), their environmental objectives and the environmental legislation they enact and implement.*[105]

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[102] WTO Appellate Body Report on Measures Affecting the Production and Sale of Clove Cigarettes *(US – Clove Cigarettes)*, WT/DS406/AB/R, adopted 4 April 2012, para. 174.
[103] Ibid at para. 96.
[104] *See, eg,* E Reid, 'Squaring the Circle for Tomorrow's World: A Comparative Analysis of EC and WTO Approaches to Balancing Economic and Non-Economic Interests in International Trade' in T Tridimas and P Nebbia (eds), *European Law for the Twenty-First Century: Rethinking the New Legal Order, Vol. 1* (Oxford: Hart Publishing, 2004) 303, 310.
[105] WTO Appellate Body Report on United States – Standards for Reformulated and Conventional Gasoline *(US-Gasoline)*, WT/DS2/AB/R, adopted 29 April 1996, 29.

The Preamble to the TBT Agreement also states:

> *No country should be prevented from taking measures necessary…for the protection of human, animal or plant life or health, of the environment, or for the prevention of deceptive practices, at the levels it considers appropriate.*[106]

WTO law is deferent to national policy objectives in recognition of the diversity of its global membership and its limited mandate. It is characterized as an instrument of negative rather than positive integration: instead of harmonizing or coordinating policies, its role is limited to removing undue obstacles to free trade.

While AB has clearly stated the intention of maintaining a country's desired level of protection, its regulation still must conform to WTO law. So, for example, in *US – Gasoline*, after affirming that Member States have autonomy to pursue environmental objectives, the AB concluded: 'So far as concerns the WTO, that autonomy is circumscribed only by the need to respect the requirements of the General Agreement and the other covered agreements.' [107]

Through affirming that the same level of protection will be achieved, the AB implies that it is possible to have both complete national autonomy (in terms of level of protection) and complete WTO conformity. This formulation may seem contradictory. This is resolved by the concept of 'hidden protectionism', which suggests that a regulation may appear to pursue particular regulatory goals but in fact its true purpose is to protect domestic producers. Along these lines, the EU has often been accused of crafting environmental regulations in order to complicate imports.[108]

Distinguishing legitimate and non-legitimate protectionism is not a straightforward process; the task of the dispute settlement bodies is difficult and subtle, and they have developed mechanisms to distinguish between the two. These mechanisms include examining whether a measure's structure and application are designed to discriminate against imported products, determining the appropriateness of the means-ends relationship between the regulation and the goal, and assessing the reasonable availability of other measures to achieve that goal.

For the reasons stated in the section above, EU biofuels sustainability criteria do not constitute hidden protectionism. Instead, they may struggle to conform to

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[106] Agreement on Technical Barriers to Trade, Article 12, 14 April 1994, GATT Secretariat, *The Results of the Uruguay Round of Multilateral Trade Negotiations, the Legal Texts* (Cambridge: Cambridge University Press, 1994) 121.
[107] WTO Appellate Body Report on *United States – Standards for Reformulated and Conventional Gasoline (US – Gasoline)*, WT/DS2/AB/R, adopted 29 April 1996, 29.
[108] *See, eg,* Chapter 7, and World Bank, *Food Safety and Agricultural Health Standards: Challenges and Opportunities for Developing Country Exports* (Washington, DC: The World Bank, 2005).

WTO law because of their characteristics; many of these characteristics can be generalized to 'sustainability'. This demonstrates a shortcoming with these AB mechanisms. Chapters 3 and 4 document this issue in depth. In brief (and oversimplified) summary, in the context of Article XX and TBT 2.2, a measure must clearly contribute to the regulatory goal at stake. This is a more difficult requirement when regulations contribute to 'sustainability' goals which are broadly defined and have uncertain legal weight. Sustainability regulation is process-oriented and has extra-territorial impacts, both of which are controversial characteristics from a WTO perspective. Finally, sustainability criteria, and in particular proposed indirect land use change regulation, respond to emerging environmental problems that may lack clear recognition through multilateral agreements or international standards. These regulatory challenges have already shaped the criteria. The desire to ensure compliance with WTO law encouraged the EU to introduce more flexibilities and less stringent requirements, to include clauses affirming openness to negotiation and to base their regulation carefully on international standards.

Chapters 5 and 6 also focus on the mechanisms by which the AB determines whether a measure is discriminatory. They also conclude that the AB's interpretations have led to an imbalance in favour of trade liberalization. However, rather than the regulatory characteristics of sustainability, these chapters focus on the issue of competitiveness in the National Treatment Principle ('NTP').

The AB has stated repeatedly that a measure will not be in conformity with the NTP if it has a negative impact on conditions of competition to the detriment of imported products. The determination of the extent and nature of this competitive relationship depends on how they interpret the market evidence. It also depends on the importance that they give to factors other than competitiveness, such as the legitimacy of the distinctions that underlie differential treatment between two products in dispute. These chapters argue that the AB's interpretation of these issues in general has favoured trade liberalization.

All this suggests that there may be an imbalance in WTO law, so that it plays a more invasive role in shaping national regulation than proscribed by its negative integration function. Yet WTO-legality is a flexible rather than an absolute concept. The AB has a significant amount of discretion in how they interpret WTO

provisions.[109] Reflecting the unsettled nature of WTO law, AB interpretations should be seen as a spectrum. At one end of this spectrum are interpretations more deferent to national policy goals; at the other are stricter interpretations of WTO commitments. The AB may provide more deference to national policies, such as the central case study of this thesis, within the framework of existing provisions.

This raises the question of what factors influence where on the spectrum the AB falls. Another concern of this thesis, which appears throughout its chapters, has to do with pure balancing, in other words weighing the importance of the goals a measure pursues against its trade restrictiveness. As stated above, the AB has been clear that this is not a formal component of dispute settlement. However, pure balancing may play an implicit role. This thesis documents this possibility in the context of both the NTP of GATT Article III/TBT 2.1 and also GATT Article XX/TBT 2.2.

As argued in Chapters 5 and 6, pure balancing might influence whether a measure is in conformity with the NTP. As suggested by the disputes analysed in those chapters, if a regulation pursues a particularly important value, the AB might be more tempted to conclude that it is conformity with the NTP even if it has a negative impact on conditions of competition.

In GATT Article XX/TBT 2.2, pure balancing may take place in the context of established judicial reasoning. When determining whether a measure is necessary, the AB might second-guess the level of protection a country wishes to pursue. Further, the AB sometimes recommends changing the means (to make them less trade-restrictive) while maintaining the ends (the desired level of protection).[110] However, in modifying the means the recommendation might actually weaken the ends, even if this is not the stated intent. This may also be read as an implicit form of pure balancing; while the stated intent is to maintain the desired level of protection, the actual impact is to 'rebalance' in favour of trade liberalization due to the uncertain importance of the value at stake.[111]

This issue has important implications for a dispute on biofuels sustainability criteria. An interpretation of the importance of the value at stake is influenced by

[109] J Scott, 'International Trade and Environmental Governance: Relating Rules (and Standards) in the EU and the WTO', (2007) 15(2) *European Journal of International Law*, 311.
[110] *See, eg,* Reid, above n. 104, at 315.
[111] *See* the analysis of this issue throughout Chapter 3, particularly Section 3(E).

underlying social and environmental norms, which continue to evolve.[112] Thus the case study raises interesting questions about the weight of the values at stake, sustainable development, biodiversity and climate change prevention. As compared to, for example, human health, it seems difficult to predict the influence of these norms. In general, they are emerging and have controversial elements, and may lack targeted international standards and agreements. This has larger implications with respect to the relationship between WTO law and emerging environmental regulation more generally, offering an opportunity to examine how to avoid disciplining progressive environmental regulation simply because of these regulatory features.

B. Outline

Chapter 2 focuses on the relationship between the WTO and sustainable development. The WTO has embraced sustainable development as a 'central principle'. Yet, the primary responsibility for achieving sustainable development lies not with the WTO, but rather its Members: national governments. Thus, one important aspect of the WTO's institutional support for sustainable development is simply non-interference in national sustainable development policies. For this reason, evaluating the compatibility of EU sustainability criteria with WTO law is useful to understanding the WTO's pragmatic relationship with sustainable development more generally.

Such an analysis requires an understanding of what sustainable development means, and its relationship with the WTO's primary goal of liberalizing trade through a rule-based framework. In particular, legal texts and informal statements have proclaimed repeatedly that the goals of sustainable development and those of trade liberalization are 'mutually supportive'. This chapter critiques this theoretical conception. While at times the goals of sustainable development and trade liberalization may align, at times they will conflict. Therefore, rather than mutual supportiveness, a more useful conceptual structure is that of *balancing* between these goals.

Chapter 3 focuses on the relationship between EU biofuels sustainability criteria and WTO law. This chapter argues that the desire to accommodate WTO law, evident in the wording of the EU's regulation, resulted in a weaker set of regulations.

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[112] *See, eg,* P Low, G Marceau and J Reinaud, 'The Interface Between the Trade and Climate Change Regimes: Scoping the Issue' (2011) Staff Working Paper ERSD-2011-1, World Trade Organization, Economic Research and Statistics Division, 15.

Even without a dispute, the WTO exerted an institutional influence on this national regulation. This suggests an imbalance in favour of trade liberalization at the expense of national regulatory autonomy.

The chapter then focuses on 'sustainability' as a regulatory concept, arguing that it poses particular challenges for WTO law due to its regulatory characteristics, as described above. EU biofuels sustainability criteria embody these regulatory characteristics.

Chapter 4 continues the analysis of the regulatory characteristics of sustainability and extends this to indirect land use change, or 'ILUC'. The EC is currently reviewing several options to introduce additional ILUC regulation into existing biofuels sustainability criteria. ILUC shares many of the same regulatory characteristics as the existing criteria: it is complex, process-oriented and difficult to measure. ILUC regulation is necessary to achieve the intent of the EU's regulation: mitigating climate change. However, all of the options the EU proposes pose serious risks of violating WTO law. The chapter analyses the proposed options and their trade law challenges. It then argues that these challenges result not from the EU's protectionist intent, but rather the regulatory characteristics outlined above.

Chapter 5 identifies interpretive issues that define the balance between national regulatory sovereignty and trade liberalization in the NTP. The first issue is the role of market evidence in establishing whether a measure is in compliance. The AB has moved away from an evidence-based approach of assessing competition, focusing more on the application of the measure. Past disputes demonstrate that this interpretation strengthens the NTP at the expense of national sovereignty.

The second issue is the influence of protectionist intent in determining WTO-compliance. In some disputes the AB has concluded that a measure violates the NTP solely because it results in a negative impact on conditions of competition for the imported product in dispute. In others they have decided that the regulation is based upon legitimate regulatory distinctions rather than the desire to protect domestic products; therefore it is in compliance. The latter approach provides more deference to national regulation.

The chapter then analyses the relationship between EU biofuels sustainability criteria and the NTP. This analysis highlights how the AB's interpretation of these two issues would likely influence the outcome of a dispute.

Chapter 6 focuses on the role of consumer preferences in the NTP. Consumer preference is significant with respect to public policy regulations such as EU biofuels sustainability criteria. Assessing compliance with the NTP is based upon evaluating the competitive relationship between products; if consumers do not consider products competitive, this will shape the outcome of the dispute. Thus how consumer preferences are measured and applied is a crucial question.

In some disputes, the AB has argued that consumer preference might be distorted by a measure in dispute, and thus should be dismissed. This chapter argues that this reasoning is problematic, particularly with respect to public policy regulation. This would imply that the preferences of EU consumers vis-à-vis sustainable versus conventional biofuels should be disregarded, as they would be shaped by the EU's regulation. The chapter concludes that one means for 'rebalancing' toward a more deferent approach to such regulation would be to take these preferences into account when evaluating product competitiveness.

Chapter 7, the Conclusion, further reflects on the major findings and themes of the thesis.

C. Scope

Perhaps the obvious result of this thesis would be a systematic analysis of whether EU biofuels sustainability criteria violate WTO law; in other words, a more in-depth version of existing legal analyses. However the thesis has instead adopted a non-comprehensive, thematic structure. This reflects a technical limitation: a dispute may rest upon national implementation, particularly strategies for meeting the RED's biofuels targets. Without documenting the implementation strategies of each Member State, a vast and complex undertaking, it seems difficult to produce a decisive analysis of the criteria's legality. An investigation of the compatibility of national implementation strategies with WTO law will likely attract further attention both from academics and biofuels producers, particularly once implementation is better established.

Yet there are also more fundamental reasons for avoiding a decisive answer regarding whether the criteria are legal. As stated earlier, the thesis argues that AB decisions demonstrate a spectrum of interpretation; thus there is no objectively correct way of evaluating whether a regulation violates WTO law. Due to this uncertainty,

this thesis' answer to the question of whether the criteria violate WTO law is: they might. Further, whether they do or not would provide important insight into the balance the AB has struck between sustainable development and trade liberalization.

The primary goal is not to assess whether the criteria are WTO-compatible, but rather to document what they reveal about the relationship between the WTO and national sustainable development regulation more broadly. For this reason, though the criteria are a frequent point of reference, they do not form the primary focus of every chapter. Instead, the thesis identifies several areas of particular interest with respect to this relationship.

There are many interesting aspects of biofuels regulation that fall beyond the scope of this thesis. It should be noted that the thesis does not address all potential sources of WTO conflict regarding EU biofuels policies, which include subsidies and tariffs. While the EU has suggested it intends to relax these barriers, it has also been speculated that they will introduce further subsidies and/or tariffs to protect domestic biodiesel producers in the future.[113] There could be a trade dispute in this area.

The thematic approach enables an in-depth analysis of the selected trade law questions. However, while the thesis focuses on provisions that would likely be central in a dispute, it is also possible that a dispute would involve provisions not addressed, eg TBT Article 12 which requires special and differential treatment of developing country Members with respect to technical regulations.[114] Also, although there is a secondary focus on GATT Articles I and XI and TBT Article 2.4, these are not treated as comprehensively.

Finally, the emphasis on WTO law rather than national governance means that the thesis does not focus on the implementation of the criteria on the national level, either in the EU or internationally. Many important research topics arise in this context, such as assessment of the effectiveness of the criteria in achieving their goals and the influence of the EU criteria on international biofuels production processes. However, to delve into the details of national implementation from either a legal or a pragmatic perspective would require study and fieldwork beyond the scope of this particular project.

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[113] Swinback, 'EU Support for Biofuels and Bioenergy, Enviromental Sustainability Criteria, and Trade Policy', above n. 12, and Business Recorder, above n. 95.
[114] Agreement on Technical Barriers to Trade, Article 12, above n. 108, at 134.

Chapter 2

Mutual supportiveness versus balancing: Sustainable development as a WTO principle

1. Introduction

In the words of the WTO Secretariat, 'the WTO's founding agreement recognizes sustainable development as a central principle, and it is an objective running through all subjects in current Doha negotiations.'[1] Its stated importance to the WTO Secretariat, as well as in the Doha Ministerial Declaration, suggests that the concept wields great influence. In fact, it forms only an oblique part of the WTO legal framework. Rather than a binding legal rule, it remains a broad principle, and a source of conceptual guidance. The Appellate Body ('AB') has well characterized this influence by stating that the term 'gives colour, texture and shading to the rights and obligations of Members under the WTO Agreement'.[2]

To some extent, this role reflects the vague nature of the term itself. This vagueness results from its breadth, and resulting disagreement about how it should be interpreted. Yet, the potential for disconnection between the term's stated importance, and its real influence, should provoke critical questions. The most significant of these has to do with translating the principle into practice: achieving sustainable development through national policies. The question is whether the WTO framework supports such policies (as would be hoped given its institutional embrace of the term) or if it actually serves to hinder them. Though it has not resulted in a dispute, using sustainable development as a justification for national policies with potential negative trade impacts has already created controversy, in the case of EU biofuels sustainability criteria. This particular case study reveals potential incompatibility

[1] Available on the WTO website at http://www.wto.org-english-tratop_e-envir_e-sust_dev_e (visited 14 September 2012).
[2] WTO Appellate Body Report on United States – Import Prohibition of Certain Shrimp and Shrimp Products *(US – Shrimp)*, WT/DS58/AB/R, adopted 15 June 2001, para. 155.

between sustainable development as a WTO principle, and as applied by WTO Member States in practice.

To delve further into this relationship, this chapter examines the ordinary meaning of sustainable development in the WTO: its definition and interpretation in principle. This interpretation shapes the term's role in legal texts and negotiations. It also influences dispute adjudication, and may help determine WTO-compliance of specific national policies.

The WTO does not provide a definition of sustainable development. However, its stated interpretations of sustainable development, and its relationship with trade, align closely with the principal international law treaties which gave rise to the term's global prevalence. These UN treaties, which also share many of the same signatories, thus provide a source for common and conventional definitions. The first of these is meeting the needs of the present while allowing future generations to meet their needs. The second definition characterizes sustainable development as consisting of three component parts, or 'pillars': social welfare, environmental conservation, and economic development. These interpretations of the term feature frequently in international law texts, and there is formal justification for basing the WTO definition on them.

These definitions are also inextricable from controversy. The divisive question may be stated (and somewhat oversimplified) as: will the growth of the economy serve, or imperil, environmental and social welfare goals? The same broad controversy applies to the relationship between sustainable development and trade liberalization. Some environmental and social welfare advocates have argued that trade liberalization has a negative impact. This is because it creates a race to the bottom in terms of standards, by globalizing markets, and encourages more exploitation of resources. In other words, there is a *lack* of mutual supportiveness between trade liberalization and sustainable development.

In contrast, the WTO approach has specifically emphasized that the goals of trade liberalization and sustainable development *are* mutually supportive. The underlying assumption is that trade liberalization leads to greater prosperity, which creates the resources for better environmental management and social policies.[3] The

[3] Prominent international treaties that address sustainable development, notably the Plan of Implementation from the World Summit on Sustainable Development, also support this conclusion. *Plan of Implementation* (2002) United Nations, World Summit on Sustainable Development,

gap between these underlying assumptions represents a core ideological divide, and helps explain public protest about the impacts of the trade liberalization process that the WTO has overseen.

The concept of mutual supportiveness is not only conceptually, but also pragmatically, central: it shapes the WTO approach to sustainable development. The Doha Development Agenda ('DDA') work, for example, takes the explicit approach of finding, and focusing on, areas of mutual supportiveness, or win-win-win situations.[4]

Any conclusion about the fundamental relationship between sustainable development's three 'pillars' is bound to be not only broad-based but also polarizing. For this reason, rather than mutual supportiveness (or its converse, mutual unsupportiveness) a more productive concept to characterize the relationship between sustainable development's pillars is that of balancing. International law on sustainable development includes statements that describe the central importance of both mutual supportiveness between the pillars, and also the need to balance the goals they represent. Balancing is not a normative concept. It includes the possibility that sustainable development's various goals may harmonize. However, if they do not, it may become necessary to prioritize certain objectives at the expense of others.

WTO Secretariat statements have recognized that sustainable development requires balancing. For example, Pascal Lamy, the WTO Director General, stated that 'From a policy perspective sustainable development involves careful balancing between progress in each of its pillars….'[5] At times, however, the WTO oversimplifies the assertion that trade liberalization inherently harmonizes with the concept's other pillars. It is easy to understand why: sustainable development represented by 'mutual supportiveness' suggests a soft, nonintrusive role for the concept with regard to the WTO mandate of trade liberalization. However, the sustainable development represented by 'balancing' is harder: it prompts the question of which goal is most important, and who is empowered to decide.

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http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIToc.htm (visited 14 September 2012).

[4] *See, eg,* the WTO website on fisheries subsidies: http://www.wto.org/english/tratop_e/envir_e/win_e.htm; or environmental goods and services: http://www.wto.org/english/tratop_e/envir_e/envir_neg_serv_e.htm (visited 14 September 2012).

[5] GP Sampson, *The WTO and Sustainable Development* (Tokyo: United Nations University Press, 2005) vii. The following analysis draws from this book.

Apart from the specific context of sustainable development, balancing has been theme in the context of WTO dispute settlement. One of the core functions of the WTO is to ensure that Member States do not discriminate against imported goods and services. The question is: when national regulations are trade-restrictive, how can the balance be drawn between a Member State's right to set regulations to achieve their own domestic goals, and their WTO obligation to liberalize trade? The concept of sustainable development thus echoes or amplifies some of the most controversial challenges facing the WTO as an institution. Perhaps it can be said that committing to sustainable development in principle is much easier than in practice: the former can mean little, while the latter poses a steep challenge.

With these broader issues in mind, it is useful to return to the more pragmatic question of the role of sustainable development in the WTO. Lamy has emphasized the importance of appropriate national policies to achieve mutual supportiveness between sustainable development and trade liberalization. More specifically, mutual supportiveness does not happen automatically; it must be brought about through adequate domestic policies.[6] This means that a crucial area of concern for environmental and social welfare activists has to do with national sovereignty to establish such regulations.

Given its institutional embrace of the term, it would be hoped that the WTO framework supports its Members in setting policies that aim to achieve sustainable development, rather than hindering them. Yet, due to the breadth and vagueness of the term's definition, if accepted *carte blanche*, sustainable development provides tremendous discretion for national governments to set trade-restrictive regulations based on broad or vague justifications. Thus, while sustainable development seems a principle of compromise, its national application may be quite controversial from the perspective of WTO law. The subsequent Chapter 3 will analyse an important test of national sovereignty to pursue the goal of sustainability: EU sustainability criteria for biofuels.

To set the stage for this analysis of sustainable development in practice, this chapter focuses on the inextricable issues raised by sustainable development as a WTO principle. To this end, it will briefly outline the term's role in international law,

[6] Ibid at x.

its 'ordinary meaning', major relevant critiques of the term, the WTO interpretation of its meaning, and its legal weight in WTO treaties, negotiations and dispute settlement.

2. Sustainable development as a legal principle

A. Sustainable development at the centre of public international law

Since its introduction less than twenty-five years ago, the term sustainable development has become a building block of many international environmental conferences and treaties. The 1987 World Commission on Environment and Development, commonly known as the Brundtland Commission, marked the introduction of sustainable development to the United Nations lexicon, and provided its most frequently utilized and widely embraced definition:[7] meeting the needs of the present without compromizing the ability of future generations to meet their own needs.

In 1992, the UN Conference on Environment and Development held in Rio de Janeiro captured growing global interest in preserving the environment. The conference, more commonly known as the Earth Summit, was the most widely attended in UN history.[8] Sustainable development featured heavily in the resulting agreement: the *Rio Declaration on Environment and Development*, which included 'Agenda 21' (an agenda for the 21st century), defined as a 'comprehensive programme for action in all areas of sustainable development'.[9] It also called for the establishment of the Commission on Sustainable Development, which meets biennially. Sustainable Development was then included in the Millennium Development Goals.

In 2002, for the first time, sustainable development became the organizing principle of an international conference. The World Summit on Sustainable Development (WSSD) in Johannesburg produced a Plan of Implementation, and was

[7] There is widespread consensus about this; *see, eg,* A Millington and C Williams, 'The diverse and contested meanings of sustainable development' (2004) 170(2) *The Geographic Journal*, 99-104.
[8] United Nations (1992) General Information on Earth Summit, Rio de Janeiro, http://www.un.org/geninfo/bp/enviro.html (visited 14 September 2012).
[9] United Nations Division for Sustainable Development (1992) *Earth Summit: Agenda 21*, http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21toc.htm (visited 14 September 2012).

heralded by then-UN Director General Kofi Annan as 'making sustainable development a reality'.[10]

It has also been included, not only in many of the UN multilateral environmental agreements, but in a number of trade and investment agreements, and treaties for bilateral or regional cooperation.[11] The prominent role of sustainable development in international law, resulting from these high-profile treaties and conferences, has helped impel its global prevalence and legitimacy as a conceptual structure for environmental problem solving.

B. Sustainable development in WTO texts

The international embrace of the concept of sustainable development also extends to the WTO. The term has been included in the Marrakesh Agreement which founded the WTO, as well as AB decisions, the DDA, and the terms of reference for the Committee on Trade and Environment. In a 2007 address, Lamy remarked that 'Sustainable development should be the cornerstone of our approach to globalization and to the global governance architecture that we create. If I have come to this forum, it is to deliver a message: the WTO stands ready to do its part'.[12] Lamy has also characterized sustainable development as a 'formal goal' of the WTO.[13]

The basis for this recognition is that, even though the WTO is primarily a trade organization, the expansion of global trade and the growth in the number of WTO members means that its influence has become more pervasive. Following from this, the influence of trade liberalization includes impacts on sustainable development; the WTO has a responsibility to respond.[14] As a trade liberalization organization, its response is not to set out positive policies to achieve sustainable development. Instead, its approach is based upon identifying areas of overlap between trade and sustainable development.

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[10] United Nations, Press Release: 'Johannesburg Summit 2002', World Summit on Sustainable Development, www.johannesburgsummit.org/html/media_info/mtg_summaries/balipressrelease_opening.pdf (visited 14 September 2012).

[11] A Cosbey, 'A Sustainable Development Roadmap for the WTO' (2009) Trade and Investment Programme, International Institute for Sustainable Development, 3.

[12] P Lamy, Address to the UNEP Global Ministerial Environment Forum in Nairobi, Kenya, 5 February 2007, http://www.wto.org/english/news_e/sppl_e/sppl54_e.htm (visited 14 September 2012).

[13] Sampson, above n. 5, at viii.

[14] Ibid at Foreword.

WTO covered agreements establish sustainable development's influence, and outline the role it plays in WTO negotiations. Sustainable development is featured in the first sentence of the preamble to the Marrakech Agreement, setting the tone for this founding agreement of the WTO:

> *Recognizing that their [Members'] relations in the field of trade and economic endeavour should be conducted with a view to raising standards of living, ensuring full employment and a large and steadily growing volume of real income and effective demand, and expanding the production of and trade in goods and services, while allowing for the optimal use of the world's resources in accordance with the objective of* ***sustainable development****, seeking both to protect and preserve the environment and to enhance the means for doing so in a manner consistent with their respective needs and concerns at different levels of economic development. [Emphasis added]*[15]

Later in the text, the Agreement cites the preamble as a justification for the establishment of the Committee on Trade and Environment, one of whose objectives is 'to identify the relationship between trade measures and environmental measures, in order to promote sustainable development.'[16]

The 2001 Doha Ministerial Declaration furthered the notion that trade liberalization should contribute to sustainable development. As well as mandating sector-by-sector analysis of sustainable development by the Secretariat, it also contains Paragraph 51, which instructs the Committee on Trade and Environment ('CTE') and the Committee on Trade and Development ('CTD') 'to identify and debate developmental and environmental aspects of the negotiations, in order to help achieve the objective of having sustainable development appropriately reflected.'[17]

C. Sustainable development's legal weight

The legal weight of sustainable development forms a debate in the context of public international law in general. Some have interpreted its role in treaties and international commitments as a binding legal requirement; on the other side of the spectrum, it has been seen as a source of general conceptual guidance.[18]

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[15] Marrakesh Agreement Establishing the World Trade Organization, Preamble 1(A), 14 April 1994, GATT Secretariat, *The Results of the Uruguay Round of Multilateral Trade Negotiations, the Legal Texts* (Cambridge: Cambridge University Press, 1994) 4.
[16] Ibid, Decision on Trade and Environment, at 411.
[17] World Trade Organization, *Doha Ministerial Declaration*, Paragraph 51, WT/MIN(01)/DEC/1, 20 November 2001, http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm (visited 14 September 2012).
[18] M Campins-Eritja and J Gupta, 'The role of 'sustainability labeling' in the international law of sustainable development' in N Shrivjer and F Weiss (eds), *International Law and Sustainable*

While setting out a focus on sustainable development in WTO negotiations, its treaty applications do not make it a legal rule. Instead, it is a general principle. Preambular language is non-binding, and so the concept does not carry as much weight as it could in the WTO agreement. Sustainable development is not included as one of the Article XX general exceptions, which can be cited by a country to justify domestic regulations that otherwise violate WTO law. As an exception, its relevance would be more clearly defined, as a country would be able to state as a direct defence that a regulation seen as violating WTO law had as its objective the goal of sustainable development.

The oblique role of sustainable development in the WTO reflects in part widespread resistance among developing countries, who feared that developed countries would set national regulations based on the concept of sustainable development which would act as disguised barriers to trade. Another concern was that sustainable development's emphasis on intergenerational equity deemphasized contemporary problems of inequality. They did not want to be forced to make sacrifices to solve problems they did not create. Finally, a common argument against giving sustainable development too much influence held that the WTO was originally conceived as a trade organization; thus, these problems are outside its mandate.[19]

To understand sustainable development's legal weight as a 'central WTO principle', an important question has to do with the influence of principles in general in the WTO system. Formally, this role is not well defined.[20] Erich Vranes usefully summarizes the relationship between rules and principles. Though they are both based upon the concept of norms, the difference comes from the matter of degree, having to do with four basic criteria: the extent of its generality, the immediateness of its link to the concept, or idea, of law, its importance for the legal order, and the manner of its creation.[21] With this framework, specific factors that contributed to sustainable development's status as a principle, rather than a rule, can be identified. These include its general and broad nature, the fact that it is not necessarily primary to the WTO's

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Development - principles and practice, *Developments in International Law*, Vol. 51 (Leiden/Boston: Martinus Nijhoff, 2004) 259.

[19] Sampson, above n. 5, at 20-21.

[20] M Hilf, 'Power, Rules and Principles – Which Orientation for WTO/GATT Law?' (2001) 4(1) *Journal of International Economic Law,* 111.

[21] E Vranes, *Trade and the Environment: Fundamental Issues in International Law, WTO Law, and Legal Theory*, International Economic Law Series (Oxford: Oxford University Press, 2009) 110.

function of liberalizing and making predictable international trade, and the controversy associated with its adoption.

The role of a principle is to provide general guidance that can be adhered to as much as possible. The extent to which it can be adopted, Vranes indicates, is determined by 'opposing rules and principles'. Rules, as opposed to principles, are fixed points.[22] Thus, sustainable development is not as formally important or influential as binding WTO rules. In the event that they conflict, rules prevail. The presence of opposing rules or principles may also limit sustainable development's influence. Non-discrimination, for example, is more integral to the WTO's legal order. Thus, if a sustainable development policy discriminated against imported goods, it does seem that the principle would not prevail against WTO rules prohibiting such discrimination. In general, however, the role of sustainable development as a WTO principle seems broadly open to interpretation.

This is not to say the term has no formal influence. Its inclusion in the WTO Preamble is particularly significant. While preambular language is nonbinding, it can be cited in support of dispute settlement bodies' decisions. When analysing the interpretation and application of the WTO Agreement's Preamble, the WTO Secretariat itself recognized this influence. It listed the Preamble's importance to environmental disputes as the first item of consideration.[23]

There is precedent for this influence. Important decisions on trade and environment, such as the AB Report from *United States – Gasoline*,[24] included reference to the Preamble. In this dispute, though sustainable development was not mentioned, the AB cited the Preamble in reference to the need to coordinate trade and environment policies.[25] The Preamble has also been invoked in disputes regarding trade and development. In *India – Quantitative Restrictions,*[26] the Panel stated the

[22] Ibid at 110.
[23] *See* the WTO website's analysis of the Preamble, http://www.wto.org/english/res_e/booksp_e/analytic_index_e/wto_agree_01_e.htm (visited 14 September 2012).
[24] WTO Panel Report on United States – Standards for Reformulated and Conventional Gasoline *(US – Gasoline)*, WT/DS2/R, adopted 29 January 1996, and Appellate Body Report, WT/DS2/AB/R, adopted 29 April 1996.
[25] *US – Gasoline,* AB Report, ibid. at para. V(c), 30.
[26] WTO Panel Report on India – Quantitative Restrictions on Imports of Agricultural, Textile and Industrial Products *(India – Quantitative Restrictions)*, WT/DS90/R, adopted 6 April 1999, and Appellate Body Report, WT/DS90/AB/R, adopted 23 August 1999.

importance of developing countries receiving their share of the benefits of international trade, in accordance with the Preamble.[27]

The *US – Shrimp*[28] dispute provided the best demonstration of the potential of the Preamble's inclusion of 'sustainable development' to influence interpretation of the WTO Agreement. The trade-restrictive regulation in dispute was a US requirement that its trade partners install a device on fishing nets to exclude, and thereby protect, sea turtles. While this regulation was found to violate GATT Article XI, the US argued that it should be upheld under XX(g), which addresses measures 'relating to the conservation of exhaustible natural resources.'[29] The AB took the controversial position that the phrase 'exhaustible natural resources' included not just inert natural resources, such as minerals, but also living natural resources, in this case endangered sea turtles.[30]Among other justifications,[31] the AB strongly emphasized the importance of the Preamble statement on sustainable development in illustrating the overall approach of WTO Members.[32]

3. Defining sustainable development

A. The 'ordinary meaning' of sustainable development

WTO legal texts do not include a definition of sustainable development, nor do AB Reports provide further clarity. In this sense, sustainable development falls on the other end of the spectrum from such pivotal WTO legal terms as 'like' products, or 'necessary', the interpretation of which has inspired a great deal of reflection within the context of relevant disputes.[33] The fact that sustainable development is not a legally binding term helps explain this discrepancy. The term's precise interpretation has not determined the outcome of a dispute so directly.

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[27] *India – Quantitative Restrictions,* Panel Report, ibid at para. 7.2.
[28] WTO Panel Report on United States – Import Prohibition of Certain Shrimp and Shrimp Products *(US – Shrimp)*, WT/DS58/R, adopted 15 May 1998, and Appellate Body Report, WT/DS58/AB/R, adopted 15 June 2001.
[29] *Marrakech Agreement,* above n. 15, Article XX(g), at 455.
[30] *US – Shrimp*, AB Report, above n. 28, at paras. 129-131.
[31] The Appellate Body also justified this interpretation with reference to international treaties and agreements.
[32] *US – Shrimp*, AB Report, above n. 28, at paras. 152, 153, 155.
[33] The proper interpretation of 'like' products in the WTO, for example, has a whole book devoted to it: WM Choi, '*Like Products' in International Trade Law: Towards a Consistent GATT/WTO Jurisprudence* (Oxford: Oxford University Press, 2003).

Nevertheless, if a dispute arose regarding national regulations that aim to achieve sustainable development, but in so doing violate WTO law, this might require a clarification of the precise nature of a country's regulatory intent with regard to sustainable development. In such a circumstance, the interpretation of the term would be important. This possibility will be examined in depth in the following chapter.

As a WTO treaty term, sustainable development has already had some influence in the *US – Shrimp* dispute documented above. There, sustainable development was equated with biodiversity conservation. This leaves open important questions, such as whether social welfare policies may be seen as integral to the term's definition.

WTO jurisprudence reveals that AB scrutiny of treaty terms has not solely focused on those that compose legally binding rules. For example, in *US-Gambling*,[34] defining the term 'sporting', which fell in the schedule of an individual Member under the GATS agreement, formed a significant component of the dispute, despite the fact that the term in question had not been recognized by the WTO Members as a whole. Establishing sustainable development's definition also aids in investigating whether it is by nature vague, so that is impossible to conclude its meaning with any precision.

To interpret the meaning of a term, the WTO Dispute Settlement Understanding points to the Vienna Convention on the Law of Treaties ('VCLT') as a source of customary rules of treaty interpretation. VCLT Article 31(1) has frequently been cited in WTO dispute settlement as a framework for approaching questions of textual interpretation. It states that: 'a treaty shall be interpreted in good faith in accordance with the *ordinary meaning* to be given to the terms of the treaty in their *context* and in the light of its *object and purpose*.'[35] [Emphasis added]

In the past, the AB approach to treaty interpretation has been criticized for emphasizing one of these components, ordinary meaning, over the others: context, object and purpose.[36] The AB's emphasis on discerning the ordinary meanings of

[34] WTO Panel Report on United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services *(US – Gambling)*, WT/DS285/R, adopted 10 November 2004, and Appellate Body Report, WT/DS285/AB/R, adopted 7 April 2005.
[35] Vienna Convention on the Law of Treaties, done at Vienna, 23 May 1969 in 8 *International Legal Materials*, Article 31(1).
[36] F Ortino, 'Treaty Interpretation and the WTO Appellate Body Report in US – Gambling: A Critique' (2006) 9(1) *Journal of International Economic Law,* 132; also see H Horn and J Weiler, '*European*

words, even through the use of a dictionary, has served the purpose of demonstrating that the dispute settlement system is not an activist court. The underlying justification is that, the further the WTO strays from textual interpretation, the more likely it is to be undertaking judicial activism. On the other hand, if the reasoning is grounded in the text, it will reflect more faithfully the intent of the Member States who negotiated the Agreement.

In 2000, Weiler critiqued this approach as 'the almost obsessive attempts of the AB to characterize wherever possible the normal wide-ranging, sophisticated, multifaceted and eminently legitimate interpretations of the Agreement as 'textual' resulting from the ordinary meaning of words….'[37] An emphasis on defining words tries to mask the fact that interpretation is, and should be, occurring.

More recently, the AB seems to be moving away from this approach.[38] Nonetheless, it is interesting to note the failure of textualism with regard to sustainable development. The term consists of two words, each of which has wider independent applications. The Oxford English Dictionary does not contain a definition for the term as a whole; only the individual words.[39]

The process of constructing a definition where one does not exist explicitly requires interpretation. A textualist approach aims to eliminate ambiguities, and sustainable development resists such treatment. Yet, a formal recognition that the term is ambiguous would certainly highlight any fears of judicial activism. If interpretation of sustainable development is based solely on its textual meaning, the result would be a conclusion that the term is vague, and reluctance to give it any legal weight.

As compared to text, considering the context is much more useful. Despite its historic emphasis on establishing a term's 'ordinary meaning', the AB hardly ever

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Communities – Trade Description of Sardines: Textualism and its Discontent' in H Horn and PC Mavroidis (eds), *The WTO Case Law of 2002* (Cambridge: Cambridge University Press, 2005) 253.

[37] JHH Weiler, 'The Rule of Lawyers and the Ethos of Diplomats: Reflections on the Internal and External legitimacy of WTO Dispute Settlement' The Jean Monnet Seminar and Workshop on the European Union, NAFTA and the WTO: Advanced Issues in Law and Policy, *Harvard Jean Monnet Working Paper 9/00,* Section 6, The Appellate Body.

[38] *See, eg,* WTO Appellate Body report on United States – Final Countervailing Duty Determination with respect to Certain Softwood Lumber from Canada *(US – Softwood Lumber)*, WT/DS257/AB/R, adopted 19 January 2004, para. 159; WTO Appellate Body Report on Canada – Measures Affecting the Export of Civilian Aircraft *(Canada – Aircraft)*, WT/DS70/AB/R, adopted 2 August 1999, para. 153; European Communities – Measures Affecting Asbestos and Asbestos-Containing Products *(EC – Asbestos)*, WT/DS135/AB/R, adopted 12 March 2001, para. 92.

[39] Oxford English Dictionary, Second Edition (Oxford: Clarendon Press, 1989).

considers just a dictionary definition as sufficient, and sometimes relies upon cross-referencing between the treaty as a whole, or with other relevant treaties, to provide this context.[40] In the case of sustainable development, given that the two words go together, and form a well-established concept in the context of UN treaties, these can help inform its interpretation. The lack of definition of sustainable development points to the importance of established international law definitions.

Supporting the legitimacy of this approach, in *US – Gasoline*, its first decision, the AB stated that the WTO Agreements are 'not to be read in clinical isolation from public international law.'[41] In this spirit, Lamy commented that 'the WTO is not more important than other international organizations and WTO norms do not necessarily supersede or trump other international norms….'[42] Thus, the subsequent section will consider common international law definitions when determining the meaning of sustainable development in the WTO.

Another important source of context comes from interpreting statements by the WTO Secretariat itself, as well as throughout the WTO Agreements, to discern what they reveal about the WTO interpretation of the term. While no precise definition has been given, WTO statements about sustainable development, as well as the DDA, help narrow the possible relevant international law definitions to identify the WTO's particular approach, even if it is somewhat implicit. This investigation will also form the focus of subsequent sections.

The final element of the VCLT 31(1) has to do with the treaty's object and purpose. The Preamble to the Marrakesh Agreement itself sets out the object and purpose of the WTO. Thus, sustainable development can be seen as a guiding principle, which might be applicable to any dispute. Whether or not the concept is invoked is a matter of discretion; nevertheless, its applicability is relatively unbounded. Affirming this conclusion, the AB in *US – Shrimp* stated that the objective of sustainable development should inform all the WTO covered agreements.[43]

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[40] I Van Damme, *Treaty Interpretation by the WTO Appellate Body* (Oxford: Oxford University Press, 2009) 232.
[41] *US – Gasoline,* AB Report, above n. 24, at para. 16.
[42] P Lamy, 'The WTO in the Archipelago of Global Governance' Speech at the Institute of International Studies, Geneva, 14 March 2006, http://www.wto.org/english/news_e/sppl_e/sppl20_e/htm (visited 14 September 2012).
[43] *US – Shrimp,* AB Report, above n. 28, at para. 129.

B. Public international law definitions

Strictly speaking, there is no official definition of sustainable development in existing, legally binding instruments of international law. This complicates the process of clarifying the 'ordinary meaning' with reference to the term's context. However, there are two main concepts about sustainable development that emerge from major international treaties on sustainable development which are specific, and recurrent, enough to act as definitions, though their wording at times differs slightly.

The first and most conventionally accepted definition of sustainable development comes from the Brundtland Report: 'meeting the needs of the present without compromising the ability of future generations to meet their own needs'.[44] The second definition describes sustainable development as consisting of three pillars: economic development, social welfare and environmental protection. This definition first appeared in the World Summit on Sustainable Development Plan of Implementation, which focused on practical rather than conceptual elements of sustainable development.

The centrality of these two definitions has been echoed by Lamy, who stated that:

> *In common usage, the term 'sustainable development' means securing a growth path that provides for the needs of the present generation without compromising the ability of future generations to meet their own needs. From a policy perspective, the pursuit of sustainable development requires a careful balancing between progress in each of its pillars: policies designed to advance economic development, for instance; to conserve the environment, and to ensure social progress.*[45]

While this statement does not a formal WTO definition, it further demonstrates the centrality of this conception of sustainable development.

C. Critiques of the two definitions

One of the most common critiques of sustainable development, in the WTO and beyond, is its vagueness.[46] 'Meeting the needs of the present while allowing future generations to meet their needs', identifies a conceptual problem with a vast scope.

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[44] United Nations, Report of the World Commission on Environment and Development: Our Common Future ('Brundtland Report'), Annex to General Assembly document A/42/427, Development and International Cooperation: Environment, 2 August 1987, http://www.un-documents.net/wced-ocf.htm (visited 14 September 2012).

[45] Sampson, above n. 5, at vii.

[46] Ibid at 4.

This scope makes straightforward, pragmatic applications of 'sustainable development' seem difficult. It also gives the term a wide range of possible interpretations. The concept of needs, for example, is based upon subjective norms, and continues to change, in part as a reflection of development itself. Also, while some may believe that future generations will meet their needs through technology, making conservation unnecessary, others will believe that ecosystem degradation is irreversible. Thus, there may be disagreements on exactly what should be maintained.[47] This ambiguity can result in the term demonstrating the beliefs or objectives of the practitioner, rather than representing an external, quantifiable goal.

Also, even if the principle of the need for intergenerational equity is agreed, the definition provides no framework for evaluating, or attaining, sustainable development. The interpretation will vary vastly from Member State to Member State, and seems difficult to translate into specific shared commitments. Thus, this definition plays into the recurring critique, both in the WTO and beyond, that sustainable development is vague.

The three pillars definition, on the other hand, raises the controversial question of the relationship between the pillars. The Plan of Implementation sets out the view that the pillars are mutually supportive:

> *These efforts [proposed in the Plan] will also promote the integration of the three components of sustainable development — economic development, social development and environmental protection — as interdependent and* ***mutually reinforcing*** *pillars. Poverty eradication, changing unsustainable patterns of production and consumption and protecting and managing the natural resource base of economic and social development are overarching objectives of, and essential requirements for, sustainable development.*[48] *[Emphasis added]*

The assumption of this statement is that, when economic welfare improves, so will environmental conservation and social development, thereby achieving sustainable development. This emphasis on the integration of the pillars has been echoed in subsequent UN treaties and conferences, such as the 2005 World Summit Outcome document of the UN General Assembly, which advocated the 'integration of the three components of sustainable development — economic development, social

[47] M Kane, 'Sustainability Concepts: From Theory to Practice' in J Köhn et al. (eds), *Sustainability in Question: the Search for a Conceptual Framework* (Cheltenham: Edward Elgar, 1999) 17-19.
[48] *Plan of Implementation*, above n. 3, at para. 1.

development and environmental protection — as interdependent and mutually reinforcing pillars.'[49]

As well as the concept of mutually reinforcing, or mutually supportive pillars, principal UN agreements on sustainable development also often refer to the importance of balancing the pillars. The Plan of Implementation frequently cites this need, as in its objective (b): 'Integration of the economic, social and environmental dimensions of sustainable development in a balanced manner.'[50]

Mutual reinforcement suggests that the pillars are inherently in agreement, and that there is a possibility for finding ways to achieve all three goals simultaneously. If this is the case, the integration of the goals represented by each of the three pillars should be fairly effortless. On the other hand, the goal of balancing suggests that it will be necessary to make tradeoffs, sacrificing one set of goals to obtain the others. Complicating the metaphor somewhat, each pillar is not necessarily supporting the same goals, and the pillars could even be in opposition.

More radical critics charge that this is a more accurate conception, as the goals sustainable development attempts to reconcile are fundamentally opposed. In *Deciphering Sustainable Development*, C.D. Stone points out sustainable development's contradictions, with a Marxist slant:

> *The term sustainable development is not merely vague – a masker of failed consensus – the way terms in the U.S. Constitution are vague and require case-by-case elaboration. 'Sustainable development' functions to gloss over not only failed consensus, but a latent collision course. The chasm is less a failure of language…than a poignant tussle between, roughly, Rich and Poor.*[51]

In this conception, criticizing sustainable development for being vague does not go far enough. It is not a goal, however poorly stated, to be attained. This is a social critique: fault lines are drawn between Rich and Poor. Yet a similar critique could be made along environmental lines: sustainability, with its implication of limited resource consumption, is the enemy of development, which requires an ever-accelerating use of resources. In this reading, the term itself is simply a convenient fiction.

By contrasting sustainable development with the US Constitution, the quote also implicitly underlines the difference between hard and soft law, and suggests a reason why sustainable development resists acting as the former. Rather than

[49] World Summit Outcome, United Nations General Assembly, A/60/L.1, 15 September 2005, 12.
[50] *Plan of Implementation*, *supra* note 2 at para. 121(b).
[51] CD Stone, 'Deciphering Sustainable Development' (1994) 69 *Chicago - Kent Law Review,* 977.

vagueness, it is the controversy underlying its interpretation that makes it difficult to apply coherently as a legal principle.

D. The WTO interpretation: mutual supportiveness

The WTO consists of Member States whose interpretations inevitably differ; however, the consensual version of this interpretation can be discerned through close reading of the term's principal uses, which reveal two salient aspects of this interpretation. The first is a general characterization of the relationship between trade liberalization and sustainable development as mutually supportive. Therefore, although an embrace of sustainable development implies a more prominent role for environmental and social goals in the WTO, an analysis of the term's specific uses reveals that it also demonstrates an optimistic reading of the relationship between these goals and the WTO's primary aim of trade liberalization.

The WTO, as well as the UN system, have asserted that trade liberalization and sustainable development are mutually supportive. To illustrate why, the Doha Ministerial Declaration states that:

> *It is the potential impact of economic growth and poverty alleviation that makes trade a powerful ally of sustainable development. The multilateral trading system is an important tool to carry forward international efforts aimed at achieving this goal. The purpose of trade liberalisation and the WTO's key principle of non-discrimination is a more efficient allocation of resources, which should be positive for the environment.*[52]

The Decision on Trade and Environment, from the WTO founding agreement, confirms that:

> *Considering that there should not be, nor need be, any policy contradiction between upholding and safeguarding an open, non-discriminatory and equitable multilateral trading system on the one hand, and acting for the protection of the environment, and the promotion of sustainable development on the other….* [53]

Along these lines, the Preamble of the Doha Ministerial Declaration states:

> *We strongly reaffirm our commitment to the objective of sustainable development….we are convinced that the aims of upholding and safeguarding an open and non-discriminatory multilateral trading system, and acting for the protection of the environment and the promotion of sustainable development, can and must be mutually supportive.*[54]

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[52] Doha Declaration, above n. 17, at para. 6.
[53] Marrakesh Agreement, above n. 15.
[54] Doha Declaration, above n. 17, at Preamble.

UN treaties on sustainable development echo these conceptions. During the 1992 Earth Summit, environment ministers suggested that the only contribution GATT should make to sustainable development was to conclude the Uruguay Round successfully.[55] A similar understanding resulted from the World Summit on Sustainable Development. Environmental ministers called 'to promote open, equitable, rules-based, predictable and non-discriminatory multilateral trading and financial systems that benefit all countries in pursuit of sustainable development [and] support the successful completion of the work programme contained in the Doha Ministerial Declaration.'[56]

In the statements quoted above, the Marrakesh Agreement declared that there 'should not be, or need not be' any policy contradiction between trade opening and sustainable development. The Doha Ministerial Declaration stated that these goals 'can and must be mutually supportive'. Both are interesting constructions, as they simultaneously affirm an optimistic reading of the relationship between trade and sustainable development and also suggest that there is work to be done.

An attempt to reconcile these two sentiments can also be traced through Lamy's forward to Sampson's book on sustainable development in the WTO.[57] Lamy cites the support of the WSSD in affirming that the conclusion of the DDA will further the achievement of sustainable development. He then states:

> *…although the promotion of economic development and the contribution it can make to providing the resources necessary to improve environmental and social issues have long been recognized, multilateralism is now confronted by new issues that the GATT never had to tackle. Many of these come from the trade and sustainable development relationship which I outlined above.*[58]

Lamy then sets out the means to improve the WTO relationship with sustainable development. These are pragmatic, not ideological: the approach is to improve the functioning of the WTO overall. This includes objectives such as reinforcing efficiency and legitimacy, being 'more interested in practical questions of organization and implementation,' and 'assuring better coherence with other international institutions.'[59] In other words, improvement of WTO functionality will

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[55] United Nations, *Report of the United Nations Conference on Environment and Development*, Rio de Janeiro, 3-14 June 1992, Chapter 1, Objectives 2.9(a) 3.
[56] World Trade Organisation (2002) *Report of the World Summit on Sustainable Development*, Geneva: WTO Secretariat, WT/CTE/W/220/Rev. 1, 20 December 2002, para. 47(a).
[57] Sampson, above n. 5, at ix-xi.
[58] Ibid.
[59] Ibid.

be synonymous with the success of sustainable development.

There is an important conceptual difference between proclaiming overall mutual supportiveness and selecting specific areas. To focus on areas of mutual supportiveness is a fair approach, given that the WTO is a trade organization. However, too much emphasis on overall mutual supportiveness risks being facile.

A potential resolution comes from the assertion that it is the responsibility of national governments, rather than the WTO, to bring sustainable development into being. Lamy wrote: 'Nonetheless, trade opening is neither natural nor automatically beneficial, in and of itself. It needs a system based on rules coupled with adequate domestic polices.'[60] This statement confirms the importance of not only a 'system based on rules', in other words, the WTO, but also national governments to help steer sustainable development's course.

On this topic, Sampson wrote:

> *Those promoting the virtues of trade liberalisation would not deny that trade liberalisation and growth can be harmful to the environment, or that trade liberalisation per se will not necessarily achieve sustainable development….The WTO response is that, for benefits to be realised and for trade-induced growth to be sustainable, national environmental, income distribution and social policies should be put in place.*'[61]

The WTO's role can never extend to the creation of 'adequate domestic policies'. That is a matter of national sovereignty, and the WTO is a trade organization. Yet, crucially, for the logical inconsistency to be resolved, the WTO system must respect national sovereignty to set such regulations, provided they do not clash with WTO obligations, and are 'compatible with an open and non-discriminatory nature of the multilateral trading system.'[62]

In this sense, the best role of the WTO is one of non-interference. This brings the focus onto the relationship between national sovereignty and WTO law. To paraphrase the above statements, national governments must put in place appropriate policies for social welfare and environmental conservation. However, these policies must also be consistent with WTO rules. This formulation sidesteps the possibility that such policies might at times be inconsistent with WTO rules. Indeed, by the WTO's own logic of mutual supportiveness, such a clash would signify inconsistency

[60] Ibid at x.
[61] Ibid at 55.
[62] Doha Declaration, above n. 17, at para. 32, qualifying work of CTE.

between the principles of trade liberalization and sustainable development themselves.

This leads to the importance of the concept of balancing. Regulations to achieve sustainable development may indeed have negative impacts on trade liberalization, by restricting market access of other WTO Members. The WTO's employment of 'mutual supportiveness' thus contains inherent contradictions. In the above situation, the need would arise to balance the regulatory autonomy of Member States to achieve non-trade objectives and their trade-related obligations under WTO law.

Thus, balancing provides a useful conceptual framework; more useful than mutual supportiveness.

In the context of dispute settlement, balancing has provoked debate about the authority of the WTO, as a trade organization, to rule upon issues outside its immediate mandate. Nonetheless, the concept seems unavoidable. Nonetheless, it is inevitable that the dispute settlement system will preside over situations in which it is necessary to make tradeoffs between trade liberalization and other goals. This inevitability is brought about by the overlap between trade liberalization and sustainable development, and the fact that this relationship is not mutually supportive in every scenario.

E. The WTO interpretation: the three pillars

The second salient aspect of the WTO's interpretation of sustainable development is that, in contrast to international law definitions that emphasize 'three pillars' – economic development, social welfare and environmental conservation – the WTO emphasizes two: economic development and environmental conservation. Overall, the pillar of sustainable development that deals with social welfare has played a smaller role in the WTO than environment or development. Unlike these topics, there is no tradition of specialized working groups dedicated to social welfare issues. As will be documented subsequently, relevant DDA negotiations aim to achieve a triple win of trade liberalization, economic development and environmental conservation; social welfare is not included.

One example of a social welfare issue is labour standards. There is no provision in the WTO Agreements about labour standards; historic controversy about

this topic is further examined in the next chapter. However, in recognition of its importance, the issue has been identified by the Secretariat as a core 'cross-cutting issue'.[63] Another related topic is human rights. This is not to say that the WTO is not relevant: many of its activities have important impacts that fall into this category. However, unlike the other conventional pillars of sustainable development, there has been no systematic approach.

This under-emphasis on social welfare is reflected in WTO texts. The Marrakesh Agreement demonstrates a slightly stronger identity between sustainable development and environment than a broad-based definition that incorporates social welfare and economic development as equal pillars. The first sentence of the WTO Preamble emphasizes the need for both wealth creation and 'optimal use of the world's resources'. Sustainable development's placement in the sentence closely associates it with the latter, which reflects the need for sustainability in an environmental sense. Its inclusion and usage in the terms of reference of the Committee on Trade and Environment, and not the Committee on Trade and Development, reinforces the association between sustainable development and environment, as does the Decision on Trade and Environment, which grouped environment and sustainable development together, juxtaposed with an open trading system.

The Doha Declaration's Paragraph 51 instructs the CTE and the CTD 'to identify and debate developmental and environmental aspects of the negotiations, in order to help achieve the objective of having sustainable development appropriately reflected.'[64] Thus, again, the social welfare pillar is not reflected here.

The emphasis on environment is historically consistent. Sustainable development was the conceptual link that first justified an official role for the environment in the WTO. In 1971, the GATT Council of Representatives established a Group on Environmental Measures and International Trade ('EMIT' group), open to all GATT members. The group was to be convened at the request of its members; it was only twenty years later, in 1992, that several European countries finally did so. Part of their reasoning was that international acceptance of the concept of sustainable development formed a justification for considering environment and trade in the

[63] Available on the WTO website <http://www.wto.org/english/thewto_e/whatis_e/tif_e/bey5_e.htm>.
[64] Doha Declaration, above n. 17.

WTO context.[65] Thus, the earliest inclusion of sustainable development in the WTO focused on environment rather than social welfare.

The question arises of whether this omission has to do with the WTO interpretation of the term, or whether it is an accidental artifact, subject to future reversal. Because the WTO definition is based upon international law definitions of sustainable development that include a social welfare pillar, it can be argued that this omission is erroneous.

One possibility is that the WTO interpretation of sustainable development more closely aligns with the concept of 'sustainability' than sustainable development. In his introduction to sustainable development, Reid summarizes the difference between the terms as follows:

> *A review of the literature shows that 'sustainable development' and 'sustainability' are used with a range of meanings. 'Sustainable development' usually refers to the process of 'developing' in a sustainable way…and also to the 'goal' of that process; 'sustainability' refers to the concept of sustainable development, and also-confusingly-both to a state of sustainable resource use, not necessarily the same as sustainable development, as in 'ecological sustainability,' and to a state in which the goals of sustainable development have been achieved.*[66]

As he notes, 'sustainability' can refer to sustainable development or a state in which its goals have been achieved. Indeed, the two terms are used interchangeably in many contexts. However, he also notes that 'sustainable development' can have more to do with development ('developing' in a sustainable way), while sustainability can place more emphasis on ecological considerations, for example the sustainability of species and other natural resources.

These differences are obvious: *a priori*, sustainable development places more emphasis on development than sustainability. The two definitions might be loosely correlated with the two definitions outlined previously: intergenerational equity versus the three pillars. A conception of sustainability based solely upon the vitality of ecosystems would perhaps not be as amenable to a 'three pillars' approach, as it emphasizes just one: environment.

Vagueness also arises as a possible explanatory factor. In common usage, and for many pragmatic purposes, there is probably not much of a difference between

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[65] *See* the WTO website, http://www.wto.org/english/tratop_e/envir_e/hist1_e.htm (visited 14 September 2012).

[66] D Reid, *Sustainable Development: An Introductory Guide* (London: Earthscan Publications, 1995) xiv.

sustainable development and sustainability. However, the WTO is one context in which such vagueness is not satisfactory. From a WTO perspective, the conceptual difference between a set of regulations that focus on environment, and one that incorporates a social welfare pillars, may be vast, precisely because of historic controversy associated with the labour, human rights, and trade relationship. Potential implications of the omission of social welfare on EU biofuels sustainability criteria are further examined in the next chapter.

F. Sustainable development as an international legal principle

Though the WTO de-emphasizes social welfare, as compared to public international law in general, conceptions of mutual supportiveness between trade liberalization and sustainable development are in agreement. A critique of 'mutual supportiveness' also applies to the international legal treaties which have given legitimacy to the term. Analysing the adoption of the term is instructive, as it reveals that the potential conflict between environment and development is at its foundation. In fact, it arose in response to international law's need to address this relationship. The Bruntland Report states:

> *…attempts to defend [the environment] in isolation from human concerns have given the very word 'environment' a connotation of naivety in some political circles….But the 'environment' is where we all live; and 'development' is what we all do in attempting to improve our lot within that abode. The two are inseparable.*[67]

This statement reveals political resistance to foregrounding the environment as an international priority, and justifies its importance on the basis of human welfare.

Even before the Brundtland Commission identified the importance of the environment, and proposed 'sustainable development' as a construction of the relationship between environment and development, this relationship was a topic of debate in international law. The website for the Earth Summit reports that 'The relationship between economic development and environmental degradation was first placed on the international agenda in 1972, at the UN Conference on the *Human Environment*, held in Stockholm.' [Emphasis added][68] UNEP has as its motto 'environment for development'.[69] This motto, as well as the Conference title, also

[67] United Nations, above n. 47, at Chairman's Foreword.
[68] United Nations, above n. 9.
[69] Available at the UNEP website, www.unep.org (visited 14 September 2012).

reveal resistance to embracing the environment as a stand-alone goal. Both make plain that the intention of the relevant international law is not to subjugate development goals to environmental commitments.

The concept of sustainable development seems to provide a conceptual tool for international negotiators in a realm of potential conflict: trying to identify a role for the environment without compromising other priorities, chiefly economic development. The term affirms fundamental values, such as the responsibility to future generations and dependence on the natural environment, without alienating supporters of progress and technology. Thus it strikes a middle ground between business as usual and radical environmental approaches.[70]

Also, the word itself does not suggest the conflicts, commitments or costs associated with achieving the goal. Instead, it works as an ethical guiding principle. For this reason, the quality that could be seen as a weakness, its vagueness, may actually be a key to its success. In international law, essential to achieving consensus is incorporating principles that can be applied to distinct and even conflicting national contexts. In this sense, sustainable development excels. The term's range of interpretations and applications has likely contributed to its global prevalence.

Thus, though sustainable development is accused of vagueness, this quality reflects both the depth and complexity of its duty: a positive construction of tensions between environmental, development-related, and economic goals. The divisive question is whether this positive construction is a given assumption, a goal worth striving for, or a fiction. From an international law perspective, it certainly requires less political will to conclude that these goals are mutually supportive.

G. Sustainable development and public legitimacy

As well as international and national applications, sustainable development has also emerged as a household word of the environmental movement. As much as the term forms a building block of international law, it also belongs to the ethical commons. Beyond its formal adoption in treaties, it is in common use among politicians, national and local governments, community groups, grassroots organizers, development agencies, environmental agencies, academics from many different fields, corporations, NGOs, the media, etc. To the extent that the WTO seeks favourable

[70] Reid, above n. 66, at xv.

public opinion, this popular embrace of the term is significant. Sustainable development should be seen not only as a component of the internal WTO framework, but also as a feature of its role as a public institution.

Public perceptions of the WTO became increasingly important in the wake of protest regarding the WTO's perceived indifference to social justice and environmental preservation. In a 2002 article, Esty reflected on protesting and riots that continued to contribute to the breakdown of negotiations at Ministerial conferences. In response to this, he argued that the organization needed to demonstrate sensitivity and responsiveness to non-economic goals such as poverty alleviation, environmental protection, and the promotion of public health.[71]

While Doha Declaration negotiations commenced before the Battle in Seattle, public protest formed a significant backdrop to its 2001 conclusion. The role of sustainable development in the Doha Declaration should be seen in this context. It reassures the public that the WTO is committed to considering goals besides trade liberalization as a central part of its institutional obligations.

4. Sustainable development in the WTO

A. The Committee on Trade and Development

Paragraph 51 identifies the CTD as the forum to identify and debate development issues related to sustainable development. In practice, the CTD work has been synonymous with furthering the economic development of developing countries, and ensuring that they benefit from trade liberalization and their WTO commitments.[72] Developing countries represent two thirds of WTO Members. The successful conclusion of the round relies upon their satisfaction that their strategic goals, such as the liberalization of agriculture and textiles, have been met.[73]

In the CTD, the objective of appropriately reflecting sustainable development reveals a contradiction. By definition, development is one of the objectives of sustainable development. However, developing countries have been resistant to the inclusion of the concept in the WTO. They fear that empowering sustainable

[71] D Esty, 'The World Trade Organisation's Legitimacy Crisis' (2002) 1(1) *World Trade Review*, 7-22.
[72] *See* the WTO website on development, http://www.wto.org/english/tratop_e/devel_e/d3ctte_e.htm, visited 14 September 2012.
[73] Ibid.

development as a WTO legal principle will interfere with their development. The core concern is that developed countries will put in place protectionist regulation in the name of the environment.

The resistance suggests that sustainable development's environment pillar (and its perceived protectionist implications) conflicts with its development pillar (and its promise of more market access for developing countries). This demonstrates what might be seen as an example of a lack of mutual supportiveness between environment and development.

This suggests that sustainable development can reflect the goals of both environment and development only inasmuch as it represents more market access for developing countries' goods and services. This scenario involves developed countries removing market distortions, such as subsidies and price supports. This is the goal of both the CTD in general and also some of the work of the CTE, summarized below. The example of developing countries illustrates why focusing on areas of mutual supportiveness is the most pragmatic approach. However, it does not testify to mutual supportiveness as an absolute principle: there may be instances in which environmental goals would be better served through trade-restrictive regulation.

B. The Committee on Trade and Environment

Paragraph 51 also identifies the CTE as the forum to identify and debate environmental aspects of sustainable development. The Doha Declaration also includes paragraphs 31 – 33, negotiated by the CTE, which address the trade and environment relationship. The overall approach contains an explicit emphasis on triple wins: areas in which market access can be improved while at the same time incorporating environment and development goals. Notably, this conception does not acknowledge social welfare as a pillar. Paragraph 31(iii) calls for 'the reduction or, as appropriate, elimination of tariff and non-tariff barriers to environmental goods and services', identified as a triple win. These goods and services contribute to environmentally preferable practices; the argument is that the removal of trade barriers will increase these practices.[74] Paragraph 31 also calls attention to fisheries

[74] *See* the WTO website, http://www.wto.org/english/tratop_e/envir_e/envir_neg_serv_e.htm, visited 14 September 2012.

subsidies (though this negotiation is taking place under the Committee on Rules[75]). The WTO website identifies the removal of fisheries subsidies as an example of a triple-win,[76] as they lead to overfishing and privilege developed countries over developing; therefore the liberalization of fisheries could have positive environment and development outcomes.

Paragraph 32(i) calls for attention to 'situations in which the elimination or reduction of trade restrictions and distortions would benefit trade, the environment and development'. While it has not led to as active a negotiating process, this subparagraph also deals with triple-wins.

Paragraph 31(i) deals with institutional linkages between the WTO and other Multilateral Environmental Agreements. It calls for more examination of the relationship between the Multilateral Environmental Agreements and the WTO, with 'a view toward enhancing mutual supportiveness….' This suggests that mutual supportiveness exists but must be improved, an ambiguous concept that echoes statements previously quoted from the Doha Declaration (there 'should not be, or need not be' policy contradiction between trade opening and sustainable development; these goals 'can and must be mutually supportive').

Overall, the CTE takes a somewhat tautological approach to demonstrating mutual supportiveness between trade liberalization and the social welfare and environmental goals of sustainable development, by focusing only on areas in which the achievement of these goals seems to be a side effect of trade liberalization. This limits the institutional influence of the term in the negotiations. Again, as a pragmatic approach, given the WTO mandate and resistance from WTO Members, this may well be appropriate. However, it also highlights the contradiction at the core of the WTO's relationship with sustainable development in principle: the simultaneous affirmation of mutual supportiveness and proclamation that it must be achieved. In practice, the analogous behavior in the context of negotiations is to declare that sustainable development should be implemented across the board, but only to focus on its application in selected areas of least resistance.

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[75] *See* the WTO website on the Rules Negotiations http://www.wto.org/english/tratop_e/rulesneg_e/rulesneg_e.htm, visited 14 September 2012.
[76] *See* the WTO website, http://www.wto.org/english/tratop_e/envir_e/win_e.htm, visited 14 September 2012.

C. Dispute settlement

The Doha Round is a single undertaking, meaning that all aspects of the negotiations must be concluded for one to move forward. With negotiations stalled, the dispute settlement system has taken on increasing importance as a *de facto* decision-maker.[77] This system has been called 'in all probability, the most effective area of adjudicative dispute settlement in the entire area of public international law.'[78]

For this reason, dispute settlement is a particularly important area of consideration regarding the WTO's relationship with sustainable development. Dispute settlement also provides clarity regarding the precise applications of WTO law. WTO agreements do not provide guidance specific enough to predict the outcome of a potential trade conflict.

With respect to dispute settlement, the concept of mutual supportiveness does not have much practical utility. The concept of balancing, on the other hand, has been relevant and controversial. It applies to the need to determine the appropriate level of regulatory autonomy governments should be afforded, and on what basis regulations should be maintained even if they do not conform to WTO law.[79]

Though past WTO disputes have addressed environmental and social issues, there has not been a dispute about regulations that took 'sustainable development' as the explicit and primary goal. Such a dispute would help determine not only the definition, but also the legal weight, of the term. An analysis of such regulations forms the focus of the next chapter.

5. Conclusion

The term sustainable development has inspired both widespread acceptance and widespread skepticism. In the case of the WTO, both coexist: even while agreeing to sustainable development as a central WTO principle, Member States have kept it at arm's length. The term has met with criticism across a broad spectrum, from trade

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[77] *See, eg,* G Shaffer, 'How to Make the WTO Dispute Settlement System Work for Developing Countries' (2003) International Centre for Trade and Sustainable Development ('ICTSD') Issue Paper No. 5, 11.

[78] D Palmeter and PC Mavroidis, *Dispute Settlement in the World Trade Organisation – Practice and Procedure,* 2nd Edition (Cambridge: Cambridge University Press, 2004) 234.

[79] *See, eg,* A Desmedt, 'Proportionality in WTO Law' (2001) 4(3) *Journal of International Economic Law*, 441-480; also J Trachtman, 'Trade and…Problems: Problems, Cost-Benefit Analysis, and Subsidiarity' (1998) 9 *European Journal of International Law,* 32 – 85.

negotiators to environmental activists. In the case of the former, developing countries have complained that sustainable development acts as a justification for developed countries to protect their markets, not out of concern for the environment but financial and political self-interest. (These same critiques have been directed at environmental regulation in general.)

The charge leveled by activists is that the term seems to resolve the contentious relationship between its components too neatly. Sustainable development functions as a principle of compromise, which helps explain why it has been embraced in the WTO. Yet this compromising nature has itself prompted critique: it can be dismissed as an empty public relations gesture.

These critiques result from the conception of sustainable development as an ideological presupposition. However, the term can be partly exonerated if it is viewed not as a conclusion about this relationship, but rather as a formulation of the problem itself.

Only an excessively compromise-driven interpretation of sustainable development would state that it is simply a by-product of the WTO's primary mandate of trade liberalization. A more robust interpretation must recognize that the goals represented by trade liberalization, on the one hand, and environment and social welfare regulation, on the other, sometimes clash, necessitating that the validity of the norms represented by each be compared, and a determination be made about which will prevail. Rather than mutual supportiveness between the pillars, this approach can be represented by the conceptual structure of balancing. Balancing does not suggest a solution, but merely formulates a problem of central importance to the WTO when dealing with the relationship between trade and non-trade priorities.

In the context of the DDA negotiations, the emphasis on areas of mutual supportiveness has, to some extent, ring-fenced the term's influence. In the event of a trade dispute on sustainable development regulations, however, the more unbounded challenge of balancing sustainable development with trade liberalization may arise. Lamy has pointed to domestic policies as crucial to achieving sustainable development, and ensuring its mutually supportive relationship with trade liberalization. Thus, a dispute would provide an important test of national sovereignty to pursue the goal of sustainable development. From a public relations perspective, this would likely put not only the parties in dispute, but also the concept of

sustainable development in the WTO, on trial.

Chapter 3

EU biofuels sustainability criteria: Sustainable development in practice

1. Introduction

The previous chapter argued that balancing is a more coherent conceptual approach to envisioning the relationship between sustainable development and trade liberalization than mutual supportiveness. Balancing hints at a process that must be undertaken to achieve sustainable development. But who is doing the balancing? And how is it done? This chapter addresses these questions through examining EU biofuels sustainability criteria. As vagueness and complexity are hallmarks of sustainable development, a case-by-case approach clarifies and simplifies these problems locally, if not globally.

In the event of a WTO dispute, the dispute settlement bodies would have the opportunity to interpret the WTO compatibility of sustainability regulation. EU criteria provide a focus for reflection on the relationship between sustainable development and the WTO on an institutional level. In this respect, one important issue is the role of WTO obligations as an implicit force shaping the regulatory process itself. For example, it is interesting to consider what the criteria omit. The EC has acknowledged that the desire to avoid a WTO conflict was one motivating factor for not including stronger criteria, suggesting that the existence of WTO law had a 'chilling' effect on the regulations.[1] Regulatory chill is a difficult force to document, as it takes the form of internal decision-making. Despite this limitation, when considering the relationship between WTO law and sustainability regulation, this issue is important to consider. It reveals WTO influence that has already occurred, even barring a dispute.

[1] *See, eg,* A Swinback, 'EU Support for Biofuels and Bioenergy, Environmental Sustainability Criteria, and Trade Policy', Programme on Agricultural Trade and Sustainable Development, International Centre for Trade and Sustainable Development ('ICTSD'), Issue paper no. 17, June 2009, 29.

Thus, as its first component, the chapter builds a case for regulatory chill. This case is based upon analysis of EU Parliament drafts of the criteria, which were much more comprehensive in scope; pressures imposed by current, informal complaints about the criteria; and comparative evidence from past disputes on environmental regulations.

The conclusion is that international trade law influence resulted in the EU's desire to avoid national discrimination by ensuring that the criteria apply to multiple national contexts without seeming to single out any for less favourable treatment. The EU developed a number of flexibilities in how the criteria are implemented and applied, including through introducing various means to measure the achievement of the standard they set, and emphasizing openness to negotiation and international voluntary standards. This requirement for flexibility contributed to the weakening of the criteria by creating less rigorous regulation and means of implementation. It may also have influenced the fact that some negative impacts were included in reporting and monitoring requirements, rather than as binding criteria conditioning imports. This includes the environmental problems of water and air pollution and soil erosion and indirect land use change, though the possibility of including binding criteria on these issues is still being debated.

It also includes criteria related to social welfare impacts, such as the 'food for fuel' problem of biofuels crops displacing food crops, the dislocation or disenfranchisement of local people from corporate 'land grabs', and poor labour conditions in biofuels production. With these omissions, many of the most controversial aspects of biofuels production are beyond the reach of the criteria.

The second component of the chapter focuses on the criteria as an example of 'sustainability' regulation, focusing on GATT Article XX ('Article XX') and TBT Article 2.2 ('TBT 2.2'). There has been some disagreement as to whether the TBT Agreement applies to EU biofuels sustainability criteria, and the EU itself believes that it does not. Thus, as a preliminary consideration, the chapter sets out the reasons why it is very likely that the TBT Agreement would indeed apply, as demonstrated by recent jurisprudence.

The chapter then describes how features of the WTO interpretation of sustainable development outlined in the previous chapter translate into legal questions of dispute settlement. The first is the lesser role of social welfare in the WTO

framework. The EU's omission of social welfare criteria can be linked to the WTO's lack of institutional support for sustainable development in principle.

Another issue identified in the previous chapter is the conceptual breadth and vagueness of the concept of sustainable development. To illustrate how this may weaken sustainable development's ability to act as a strong legal principle, this analysis considers a hypothetical dispute on binding labour standards (included in the current criteria, but nonbinding). Labour standards for biofuels were not necessarily of central importance to the EU but raise interesting questions about the limits of the regulatory concept of sustainable development, in part for this very reason. The Article XX/TBT 2.2 necessity test suggests that the closer a sustainability criterion is to the EU's overall intent of reducing emissions, and the more compelling in the context of the Article's subparagraphs, the more likely to be WTO-compliant. In this sense, the regulatory goal of sustainability carries little legal weight as an 'end in itself ' when justifying trade restrictions. This reflects the fact that, if it were applied as a legal rule and accepted at face value, it would create a vast territory of national regulatory discretion to set trade-restrictive regulations.

This chapter also analyses additional regulatory characteristics of sustainable development that define the existing EU criteria, and may be significant in shaping a dispute. This includes breadth, process-orientation and extra-territorial reach, all of which might be described as general characteristics of the concept of 'sustainability.' The criteria assume a large degree of discretion to pursue goals of uncertain importance, if negative free trade impacts are their result. Based upon international standards, the gravity of the harm of being *unsustainable* is not well established. There is also the question of the coherence of the EU's intent in applying these regulations, considering that they are not being applied to other agricultural products.

The larger implication is that mutual supportiveness between WTO law and national sustainable development policies is not easy to achieve. Thus, sustainable development in the WTO has given rise to a somewhat contradictory situation: despite the term's conceptual centrality and wide acceptance in principle, it is challenging to apply in practice.

In the EU, the inclusion of biofuels in renewable energy targets has been controversial, as there is widespread concern that they are unsustainable. However, these criteria have been criticized as trade protectionism, intending to block imports

and favour domestic biofuels. This judicial controversy relates back to the underlying issue of balancing: how to draw the line between trade liberalization on the one hand, and sustainability on the other, if these goals come into conflict. EU biofuels sustainability criteria embody some of the regulatory characteristics of sustainable development. They thus crystallize this more theoretical controversy into an examination of the legal details of the EU's interpretation of sustainability and its WTO-compatibility. Such an examination provides a better understanding of the scope and nature of the task of implementing sustainable development through the WTO framework.

2. EU Biofuels sustainability criteria as a 'sustainable development' case study: Regulatory chill

A. The process of formulating the criteria

Sustainability is a broad concept which could be used to justify any number of regulations. Therefore, it is interesting to consider the process by which EU bodies translated the concept into specific regulations, and why the concept of 'sustainability' was felt to be important in this circumstance.

In general terms, the criteria respond to a strong cross-cutting EU legal mandate articulated in the Lisbon Treaty's Article 11:

> *Environmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, in particular with a view to promoting sustainable development.*[2]

This statement sets out environmental protection and sustainable development as goals applicable to every EU policy. The EU here refer to the importance of 'sustainable development' rather than 'sustainability', while the biofuels criteria pursue 'sustainability'. The previous chapter identified differences between the two terms. However, they are often used interchangeably. The assumption made in this thesis is that the terms are functionally synonymous. This is supported by the fact that EU criteria contain social welfare components, even though they are non-binding.

EU bodies have recognized that their focus on sustainable development will not just remain inside Europe, but that they will strive for an international influence

[2] Article 11, *Treaty on the Functioning of the European Union*, OJ 30 March 2010, C 83/47 to C83/199.

on bringing about this goal. The Council of the European Union's Renewed Sustainable Development Strategy, for example, lists four 'key objectives': environmental protection, social equity and cohesion, economic prosperity, and meeting our international responsibilities. The last of these objectives includes the following commitment:

> *Actively promote sustainable development worldwide and ensure that the European Union's internal and external policies are consistent with global sustainable development and its international commitments.*[3]

The term 'international commitments' refers to EU obligations in international treaties and conventions, including the WTO. Thus, this expresses in very general terms the EU commitment both to sustainable development and also international trade agreements.

The final criteria prioritize emissions savings and biodiversity conservation, suggesting that these were seen as the primary components of sustainability vis-à-vis biofuels. Yet, a Parliament Draft Report suggested revisions to an early European Commission ('EC') submission,[4] recommending broader and stricter criteria. To the EC's 'environmental' sustainability criteria they added throughout 'environmental *and social*…criteria'.[5] They attempted to account for the problem of food scarcity by introducing 'no go' categories, stating that 'depending on the world food situation, a complete restriction on the use of arable land for energy production or a limitation to certain volumes will be requested'.[6]

They also called for a set of 'strict sustainability criteria' including methodologies for incorporating the sustainability impacts of indirect land use change and 'social criteria to protect e.g. small farmers in third world countries'.[7] Further, they proposed an expanded definition of 'high conservation value land', which included a consideration of impacts on basic ecosystem services, as well as the land's importance to subsistence of local populations, and their cultural identity.[8] They called for the abandonment of the RED requirement that 10 per cent of energy for

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[3] *Renewed Sustainable Development Strategy* as adopted by the European Council on 15/16 June 2006, The Council of the European Union, Brussels 26 June 2006, 10917/06, DG1, WP/pc.
[4] *Draft Report on the proposal for a directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources,* European Parliament Committee on Industry, Research and Energy, 13 May 2008, 2008/0016 (COD).
[5] Ibid at 9, 26.
[6] Ibid at 87.
[7] Ibid.
[8] Ibid at 13.

transport be sourced from biofuels, based on the concern that it would not be possible to do so sustainably.[9] Thus in its draft the Parliament attempts to address the problem of food scarcity;[10] their suggestions also respond to some of the problems resulting from 'land grabs'.

Given the high level of publicity garnered by negative social welfare impacts of biofuels, it is interesting to consider the causes of these omissions in the final criteria. As noted, the EU Renewable Energy Directive does recognize the so-called 'food versus fuel' problem, by stating that the relationship between biofuels and food crops will be monitored. However, this is a relatively weak requirement: an intra-EU, biennial reporting process. In contrast, the environmental aspects of the criteria determine whether biofuels can count toward renewable energy targets or receive financial support.

B. Trade concerns, regulatory chill and the criteria

As the subject area is relevant to agriculture, environment, transport, energy and trade, biofuels sustainability criteria also resulted from dialogue and compromise between several EC Directorate Generals. The end result was to counterbalance the strong articulation of the EU's environmental and sustainability commitments that the Parliament submission revealed against various constraints. Commentators have noted that determining the final version of the criteria, and the extent to which they should include social standards, was a controversial process, and that trade impacts were one of the main concerns at stake.[11] A stated justification for *not* including more criteria as a precondition for import was fear of incompatibility with WTO rules.[12] Thus, WTO treaty obligations provided a countervailing force to the Lisbon Treaty sustainable development obligation.

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[9] Ibid at 18.
[10] A Chakrabortty, 'Secret report: biofuel caused food crisis', *Guardian*, 3 July 2008, http://www.guardian.co.uk/environment/2008/jul/03/biofuels.renewableenergy (visited 20 June 2012); E Rosenthal, 'Rush to Use Crops as Fuel Raises Food Prices and Hunger Fears', *New York Times*, 6 April 2011, http://www.nytimes.com/2011/04/07/science/earth/07cassava.html?_r=1&hp (visited 20 June 2012).
[11] J Rankin, 'Split over standards for biofuels imports', *EuropeanVoice.com*, 24 July 2008, http://www.europeanvoice.com/article/imported/split-over-standards-for-biofuels-imports/61820.aspx (visited 15 November 2011).
[12] S Charnovitz et al., 'An Examination of Social Standards in Biofuels Sustainability Criteria', IPC Discussion Paper – Standards Series, *International Food and Agricultural Trade Policy Council*, Washington, DC, December 2008.

The WTO influence can be better understood in the context of specific GATT Articles that the criteria have the potential to violate. One of these is the National Treatment principle ('NTP') of GATT Article III(4) and TBT Article 2.1 ('TBT 2.1'). The basic concept of the NTP is that less favourable treatment should not be awarded to 'like' products, regardless of their origin.

An examination of the RED text reveals implicit references to nondiscrimination through its inclusion of language similar to the WTO Agreements. For example, Article 17(1) states that:

> *Irrespective of whether the raw materials were cultivated inside or outside the territory of the Community, energy from biofuels and bioliquids shall be taken into account…only if they fulfil the sustainability criteria….* [13]

Elements of GATT language can also be seen in EC agreements regarding biofuels, such as the EC Communication which states that biofuels support measures are 'designed to avoid any discrimination between domestic production and imports and should not act as a barrier to trade'.[14]

Similarly, the criteria could be seen to violate the Most Favoured Nation Principle ('MFN') of GATT Article I, whose relevant language reads:

> *…any advantage, favour, privilege or immunity granted by any contracting party to any product originating in or destined for any other country shall be accorded immediately and unconditionally to the like product originating in or destined for the territories of all other contracting parties.*[15]

The basis for a claim of MFN violation would be that the criteria singled out biofuels from a certain country for less favourable treatment. The jurisprudence demonstrates that an 'advantage' under the MFN is defined as something that creates 'more favourable competitive opportunities'.[16] This is also the basis of the NTP,

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[13] European Council Directive 2009/28/EC of the European Parliament and of the Council on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC' OJ [2009] L140/16 ('RED') at Art. 17(1), 18(3) and 23(5)a.

[14] Communication from the Commission to the Council and the European Parliament, 'Renewable Energy Road Map, Renewable energies in the 21st Century: building a more sustainable future', Commission of the European Communities, 2007a, 3, 12, http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52006DC0848:EN:NOT (visited 19 September 2012).

[15] *See* Marrakesh Agreement Establishing the World Trade Organization, Article I(1), 14 April 1994, GATT Secretariat, *The Results of the Uruguay Round of Multilateral Trade Negotiations, the Legal Texts* (Cambridge: Cambridge University Press, 1994) 424.

[16] Panel Report, European Communities – Regime for the Importation, Sale and Distribution of Bananas, Complaint by Guatemala and Honduras *(EC – Bananas III, Guatemala and Honduras)*, WT/DS27/R/GTM, WT/DS27/R/HND, adopted 22 May 1997, para. 7.239; WTO Panel Report on Colombia – Indicative Prices and Restrictions on Ports of Entry *(Colombia – Ports of Entry)*, WT/DS366/R, adopted 27 April 2009, para. 7.341.

which focuses on whether a measure has a negative impact upon competitive opportunities for imported products.[17]

On their face, the criteria do not discriminate between domestic and imported biofuels, or single out certain biofuels for discrimination (*de jure* discrimination). Yet discrimination can also result from the measure being applied in such a way that it negatively impacts imported more than domestic products (*de facto* discrimination). In other words, *de facto* discrimination consists of designing and applying the measure in such a way as to protect the EU biofuels market by making imports more difficult. Thus, the more flexibility built into the regulations, to accommodate diverging national circumstances, the lower the likelihood of *de facto* discrimination.

Chapters 5 and 6 of this thesis focus on the NTP and its relationship with the EU criteria. However, it is useful to highlight here some of the primary trade concerns raised in the context of the NTP/MFN principle, as they reveal the pressure trade partners exert on the criteria to be more adaptable in order to avoid singling out particular countries for discrimination. For example, in a March 2011 press release, the American Soybean Association expressed 'serious concerns' to the US Department of Agriculture and the US Trade Representative about the criteria.[18] They argued they could result in the loss of a $1 billion export market from the US to the EU. They critiqued the EU's methodology and criteria as being too context-specific.

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[17] While this does not form a focus of the thesis, it is also possible that the AB would determine that Article XI(1) best applies to the criteria. Article XI(1) specifically has to do with 'prohibitions and restrictions' applied at the border, while Article III includes 'all laws, regulations or requirements' that apply to domestic and 'like' imported products. The applicability of both Articles has been interpreted broadly, and there may be overlap between the two.

With respect to biofuels sustainability criteria, the key question is whether the measure affects the importation of products, regulated by Article XI(1), or 'imported products', regulated by Article III(4). This is further complicated by the fact that restrictions on importation are not limited to those that impact upon the process of importation. Whether applicability is mutually exclusive is somewhat of an open question that is not addressed in the measures themselves. The Panel in *India – Autos* suggested that both Articles might apply. In *EC – Asbestos*, the Panel did not consider whether the measure in dispute conformed with Article XI because it had been found to violate Article III(4). However, they did not specifically state that this was because Article XI did not apply. To the extent that sustainability criteria have a negative impact on the ability of foreign producers to import biofuels to the EU, it is possible that Article XI(1) would apply. However, constraints of time and space, and the thematic approach of the thesis, prevent a thorough analysis. WTO Panel Report on India – Measures Affecting the Automotive Sector *(India – Autos)*, WT/DS146/R; WT/DS175/R, adopted 21 December 2001, 7.246 – 7.250; WTO Panel Report on *EC – Asbestos*, WT/DS135/R, adopted 18 September 2000, para. 8.159.

[18] 'ASA Expresses Concerns about EU Renewable Energy Directive to USDA and USTR', Press Release, American Soybean Association, 9 March 2011, http://www.soygrowers.com/newsroom/releases/2011_releases/r030911.htm (visited 15 November 2011).

This criticism responded to default emissions values the EU included for many (but not all) biofuels. These aim to reduce the bureaucratic burden of complying with the criteria.[19] They can be used by biofuels producers in certain circumstances to gain access to the EU market. For the sake of transparency, the EU has included their calculation methodology in the RED and clarified that it is based upon independent scientific expertise.[20] This transparency does not guarantee WTO-compliance; the EC itself has acknowledged that there is room for improvement by stating that it will update values to accurately reflect progressing scientific knowledge.[21]

The USDA noted that the EU calculates soy biodiesel as representing only a 31 per cent reduction in greenhouse gas emissions, which disqualifies soy as a feedstock for biodiesel, as the EU cap is 35 per cent. However, they pointed out that the figures were calculated using production and transportation data from Brazilian soybeans. US calculations of US soybeans, on the other hand, revealed greenhouse gas emissions savings of up to 52 per cent.

If the methodology for calculating default values seems arbitrary or opaque, and differs from the calculations of exporters, it may be argued that it was established to discriminate against foreign biofuels and to benefit domestic biofuels. The EU criteria, however, permit the introduction of emissions levels calculated based upon alternate methodologies, as long as they are approved. This is an example of a flexibility that the EU introduced which has the impact of decreasing the likeliness of a trade dispute.

The EU's default calculations also include emissions from transport. This could be seen as *de jure* discrimination: it explicitly singles out imported biofuels for less favourable treatment. If soybeans were converted to biodiesel in the country of production (eg Brazil or the US), they would qualify, as they would be less bulky to transport. This suggests an advantage for feedstocks converted to biofuel in the producing country, rather than those who export the feedstock.[22]

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[19] European Commission, Communication from the Commission on voluntary schemes and default values in the EU biofuels and bioliquids sustainability scheme, OJ of the European Union 2010/C 160/1, 19/6/2010, 1.
[20] RED, above n. 13, at Preamble para. 83.
[21] Ibid.
[22] M Schaus and A Lendle, 'The EU's Renewable Energy Directive – Consistent with WTO Rules?', Trade Law Clinic, Graduate Institute of International and Development Studies, Geneva, Switzerland, at 28.

The existence of default values also provides an advantage to some producers and a disadvantage to others. For example, US corn ethanol does not have a default value, while EU corn ethanol does.[23] Therefore US producers must make their own calculation and then undergo conformity assessment, an additional regulatory burden. Also, some biofuels will have higher emissions values than those proscribed by the default values. If they adopt these values, they may have an unfair advantage of complying with the criteria when they should not.[24]

Trade partners might also challenge the EU's rationale for setting its particular emissions savings requirements. It has been argued that the initial 35 per cent threshold was established in order to single out imported biofuels for discrimination, as rapeseed biodiesel, the EU's main domestic source of biofuels, falls just above the line at 38 per cent savings, while palm oil (produced without methane capture) and soybean oil fall just below.[25] However, when the threshold is raised to 50 per cent in 2017, these advantages will be eliminated. A number of imported biofuels also fall above the line; for example, imported sugarcane ethanol and palm oil produced with methane capture will qualify even when the threshold is raised. This seems to argue against the conclusion that the emissions savings thresholds are discriminatory.[26]

The American Soybean Association also found fault with the EU's system of certification for high-conservation value lands. They argued that US domestic environmental regulation may actually provide a standard higher than that of the RED, even though it does not conform to the EU's exact methodology. Similarly, in a 2008 workshop hosted by the EU Parliament on facilitating biofuels imports from tropical countries, an ethanol producer from Sierra Leone characterized EU specifications on water content as hidden market protectionism. He asserted that, in fact, water quality had nothing to do with fuel quality. Instead, it was a way of excluding tropical biofuels from the market. He stated that 'We don't believe that broad land categories and default values can take into account the variety of conditions prevailing in Africa.'[27]

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[23] RED, above n. 13, at Annex V(a).
[24] Schaus and Lendle, above n. 22, at 28.
[25] F Erixon, 'The Rising Trend of Green Protectionism: Biofuels and the European Union', European Centre for International Political Economy, Occasional Paper No. 2/2012, 29 - 30.
[26] Schaus and Lendle, above n. 22.
[27] 'Sustainable Biofuels Development in Tropical and Subtropical Countries', European Parliament Report, 12 June 2008, Policy Department: Economic and Scientific Policy, Workshop Proceedings, IP/A/ENVI/ST/2008-13, 14.

With regard to land-use criteria, one possibility is that they favour ecosystems found within the EU, making compliance more difficult for certain importing countries, in particular Indonesia, Malaysia and South Africa.[28] These countries might argue that they have no choice about their ecosystems, and that the criteria are a disguised barrier to trade whose purpose is to benefit domestic biofuels.

Questions might also arise about the methodological basis for prohibiting biofuels from being grown in particular areas. To depoliticize existing criteria, the EU also tie them to international agreements and standards. High biodiversity areas, for example, are established either through national law or international designation by relevant international organizations.[29] The RED definition of wetlands will take into account the international convention on Wetlands of International Importance (the Ramsar Convention).[30] With respect to biodiverse grasslands, the EC has not yet produced a definition, but the RED states that this will be based upon 'the best available scientific evidence and relevant international standards'.[31]

Despite this reliance on international standards, which seem to eliminate the possibility of national discrimination, these definitions may still be unsettled. For example, wetlands are liminal zones between water and land whose borders are often in flux. A report by the EC's DG Environment on wetlands conservation in the EU stated that 'it is not easy to define precisely what wetlands are, with different international bodies often having slightly different definitions.'[32] Perhaps even more difficult will be the process of establishing a definition for highly biodiverse grasslands, for which there is not a strong international environmental protection framework.

These definitions draw the boundary between permitted and prohibited biofuels exports. As described in the thesis introduction, Brazil is the world's largest producer of ethanol; much of its expansion of ethanol production is occurring in an ecosystem of biodiverse grassland.[33] If the definition excludes these biofuels it will have a significant impact on Brazil's exports to the EU, and may be more likely to prompt a dispute which would cause this definition to come under scrutiny.

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[28] Schaus and Lendle, above n. 22, at 34.
[29] RED, above n. 13, at Article 17(3).
[30] Ibid at Preamble, para. 73.
[31] Ibid at Preamble, para. 69.
[32] 'Life and Europe's Wetlands: Restoring a Vital Ecosystem' (2007), EC DG Environment, 3.
[33] S Valle, 'Losing forests to fuel cars: Ethanol sugarcane threatens Brazil's wooded savannahs', *Washington Post*, 31 July 2007.

Similar concerns about the flexibility and unilateral nature of the criteria arise in the context of GATT Article XX. In the event of a dispute, if the criteria were found to violate Article III(4), the EU would have recourse to Article XX, which lists exceptions to the GATT.

Subparagraphs potentially relevant to biofuels sustainability criteria include measures:

> *(a) necessary to protect public morals;*
> *(b) necessary to protect human, animal or plant life or health;*
> *(d) necessary to secure compliance with laws or regulations which are not inconsistent with the provisions of this Agreement, including those relating to…the prevention of deceptive practices;*
> *(e) relating to the products of prison labour; and*
> *(g) relating to the conservation of exhaustible natural resources.*[34]

(The RED also invokes an implicit defence under GATT Article XX, stating that 'the consumers in the Community would…find it morally unacceptable that their increased use of biofuels…could have the effect of destroying biodiverse lands.'[35])

The Article XX chapeau provides the context for interpreting its subparagraphs. It reads:

> *Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any contracting party of measures….*[36]

The key concepts of the chapeau are that the measure should not constitute 'arbitrary or unjustifiable discrimination' or 'disguised restriction on international trade' in 'countries where the same conditions prevail'. It thus provides an additional safeguard to strike the balance between WTO obligations and national regulatory autonomy.

Article XX will be analysed extensively in the second part of this chapter; thus it is not necessary to go into depth here. However, to highlight key issues, in the context of the Article XX chapeau, past disputes also demonstrate the importance of flexibility to prevent the claim that the regulation is a form of arbitrary discrimination.

[34] Marrakesh Agreement, Article XX, above n. 15, at 455.
[35] RED, above n. 13, at Preamble para. 69.
[36] Marrakesh Agreement, Article XX, above n. 15, at 455.

In the *US – Shrimp* [37] dispute, the measure in question was a US requirement that its trade partners install a device on fishing nets to exclude, and thereby protect, sea turtles. The Appellate Body ('AB') agreed that the measure qualified under subparagraph (g), which covers measures 'relating to the conservation of exhaustible natural resources'. However, they found that it did not meet the conditions of the chapeau, for three main reasons. First, the US had a 'rigid and unbending standard', as the US required that the measure be applied 'essentially the same' way as it was domestically, regardless of differing local conditions.[38] Second, they had not made sufficient efforts to achieve a negotiated agreement with trade partners.[39] They considered that the US's attempts to negotiate seriously with some but not other trade partners had a discriminatory impact and was unjustifiable. Finally, they found that the way that the certification was administered was also unfair, as trade partners were not notified of whether they had been certified nor provided with the rationale or given the opportunity to respond.

The AB report is notable for its emphasis on 'procedural fairness and due process'.[40] It seems that the EU took this into account when crafting their sustainability criteria. The criteria pre-emptively address some of the grounds upon which the US's regulations were found to be in violation of WTO law, including through emphasizing openness to negotiation and acceptance of equivalent voluntary schemes. For example, compliance with the criteria can be proven on the basis of bilateral or multilateral agreements with the EU, or compliance with voluntary standards, thus allowing for both the possibility of negotiation and flexibility in implementation. From a trade law perspective a multilateral agreement is a safer route for introducing sustainability criteria than a unilateral EU requirement.

Another example of regulatory flexibility is in the requirements for canopy cover. Paragraph 73 of the RED states that 'Forested areas with a canopy cover of between 10 and 30 per cent should also be included, unless there is evidence demonstrating that their carbon stock is sufficiently low to justify their conversion in

[37] WTO Appellate Body Report, United States – Import Prohibition of Certain Shrimp and Shrimp Products *(US – Shrimp)*, WT/DS58/AB/R, adopted 15 June 2001.
[38] Ibid at para. 163.
[39] Ibid at paras. 166, 172.
[40] G De Búrca and J Scott, 'The Impact of the WTO on EU Decision-making', in G De Búrca and J Scott (eds), *The EU and the WTO: Legal and Constitutional Issues* (Oxford: Hart Publishing, 2001) 20.

accordance with the rules laid down in this Directive.'[41] The qualifying statement allows producers more ways to prove that they meet the criteria, which might be useful in the context of any of these provisions.

Also, rather than national-level certification, the EU applies its sustainability criteria on a batch-by-batch basis. If they required that an entire country implement the regulations before it could export, this would mean that individual producers could not export from uncertified countries even if they complied with the criteria. Also, this approach would not preserve the technically voluntary aspect of the criteria. The difference between a country-based and batch-by-batch approach was significant in the *US – Shrimp* dispute. In the aftermath of the dispute, the US adapted a number of flexibilities to make it easier for exporters to become certified and to increase transparency and communication in the application of the measure.[42] One of the WTO AB report's criticisms of the regulation in dispute was that the certification requirement was being applied unfairly, so that shrimp caught with the use of TEDs were banned from import to the US, if the vessels that caught them came from uncertified nations.[43] To respond to this problem, the US adopted a batch-by-batch approach. Commenting on this dispute, Scott wrote:

> *It may be anticipated that measures premised upon a batch-by-batch approach, as distinguished from an overall national policy based approach, may have a higher chance of success in the years to come.*[44]

However, Bernazani suggested this weakened the regulation for several reasons. First, it encouraged individual producers to export to other markets that did not have similarly restrictive regulation. Second, it provided an incentive to introduce TED devices solely to vessels that were exporting to the United States, rather than a nation's fleet at large. Third, it created difficulties in enforcement, as there was a strong incentive to falsify the certificate stating that a TED had been used, particularly

[41] RED, above n. 13, at Preamble para 73.
[42] *Notice of Proposed Revisions to Guidelines for the Revision of Section 609 of Public Law 101-162 Relating to the Protection of Sea Turtles in Shrimp Trawl Fishing Operations*, 64 US Federal Register 14,482, 25 March 1999.
[43] *US – Shrimp*, above n. 37, at para. 165.
[44] J Scott, 'On Kith and Kine (and Crustaceans): Trade and Environment in the EU and WTO' in JHH Weiler (ed.), *The EU, the WTO and NAFTA: Towards a Common Law of International Trade* (Oxford: Oxford University Press, 2000) 142.

as many exporting countries had endemic corruption.[45] These difficulties are potentially applicable to EU biofuels sustainability criteria as well.

In theory, more flexible criteria can provide equivalent and equally rigorous means to achieve a certain standard. In reality, introducing more flexibility likely does weaken the standard to some extent. The underlying driver for introducing flexibilities is to reduce the cost and burden of complying with the criteria. If a criterion is drafted in such a way as to allow for multiple different strategies of implementation, or if it is designated as a non-binding requirement, it will be more likely to avoid trade conflict.

As well as producing a definition of biodiverse grasslands, the EU is debating the introduction of stricter requirements having to do with soil, water, air, and indirect land use change. In both cases, it will be necessary to craft language that takes into account the diversity of local conditions. Major financial and political interests may be caught up in this process. Given that the EU wants to avoid a dispute, it is easy to see in general terms how the concept of flexibility might translate into weakening standards to accommodate trade partners.

C. The EU criteria's risk: NPR PPMs

In their 2001 analysis of the EU Cosmetics Directive, which restricted ingredients permitted in cosmetics and prohibited animal testing, De Búrca and Scott provided an analysis of the influence of WTO law on EU legislation.[46] The authors documented the measures the EU had taken to ensure WTO compliance. These included basing regulations on a batch-by-batch rather than country-wide basis. Further, the EC emphasized that they were attempting to develop internationally-acceptable alternative scientific methods to animal testing and negotiating with OECD members to apply these methods more globally.[47] These elements parallel the EC's efforts in the RED.

However, there is an important difference. When crafting the Cosmetics Directive, the EC assumed that relying upon a process-based distinction between products in order to justify regulatory distinctions would automatically violate WTO

[45] J Bernazani, 'The Eagle, The Turtle, The Shrimp and the WTO: Implications for the Future of Environmental Trade Measures' (2000) 15(1 and 2) *Connecticut Journal of International Law* 207, 234.
[46] De Búrca and Scott, above n. 40, at 6 – 11.
[47] Ibid at 10.

rules. The WTO-legality of trade-restrictive regulations that distinguish products based upon their production methods, or PPMs in WTO parlance, is a key question. This is a significant controversy as environmental regulations, including biofuels sustainability criteria, often focus on how a product is produced.

PPMs are sometimes split into the categories of product-related and non-product-related ('NPR'). The former, while physically invisible, have to do with a product's quality or functionality. It might be argued that the sustainability criteria's emissions savings requirements are product-related PPMs, as they define the biofuels' qualification as a viable alternative fuel source. Also, emissions levels can be linked to physical inputs, eg feedstock. However, they take into account the entire life cycle of the fuel, including the efficiency of conversion into fuel, how the production plant was powered, and the use of by-products in manufacture, which are invisible in the final product. Therefore their designation as product or non-product related is a gray area.

On the other hand, land-use requirements such as restrictions on growing biofuels in highly biodiverse areas are clearly NPR PPMs. They have to do with the ecosystem characteristics where biofuels are grown. These PPMs have been especially controversial as they do not define product specifications but instead transmit (or impose) the values of the importing country onto foreign producers. Palm oil produced in such a way that orangutans lost habitat, for example, will be virtually identical to palm oil produced in accordance with the EU criteria's biodiversity criteria.

The AB has never directly addressed the legality of NPR PPMs based upon how a product is produced. The EU assumed in 2001 that different regulatory treatment of cosmetics must be based upon physical differences between products. Therefore, from a WTO perspective it would be impermissible for the EU to distinguish between imported cosmetics tested on animals and domestic cosmetics that had not been tested on animals, but were identical in all other respects, as this would violate Article III(4), and could probably not be justified under Article XX. The authors pointed out that this assumption on the part of the EC was not necessarily correct; however, there was no clear guidance in existing disputes and their conclusion was supported by unadopted WTO jurisprudence.[48]

[48] De Búrca and Scott, above n. 40, at 8 – 9.

EU biofuels sustainability criteria, on the other hand, are based upon the assumption that such process-based distinctions do not automatically violate WTO law. Removing NPR PPMs is an example of a form of regulatory chill that the EU adopted in 2001 but resisted in 2009. This evolution is significant. As a result, one of the most interesting questions that would arise in a dispute about the sustainability criteria has to do with the legal interpretation of legitimacy of process-based distinctions.

D. Regulatory complexity

i. Food versus fuel

It is important to stress that WTO law is not the only pressure exerted against extensive sustainability regulations. Regulations must be realistic for domestic producers to implement, as well. Cumbersome regulation is likely to prompt complaint from both domestic and foreign producers.

Indeed, two of the most serious problems with expansion in biofuels production are extremely complex to address through regulation. Perhaps the most well-publicized is biofuels displacing food crops.[49] The difficulty is that a requirement to monitor biofuels' impacts on food prices introduces a broad economic calculation into a set of regulations enforced on a producer-by-producer basis. Further, the calculation may involve multiple countries, and this is difficult to reconcile with the WTO's emphasis on national regulation.

On the other hand, not all regulatory bodies have shied away from this problem. One example is the Roundtable on Sustainable Biofuels ('RSB'), which has formulated an international, voluntary set of sustainability standards. As with the EU criteria, they are not connected with the production conditions of any specific supply chain, but represent broad principles for sustainability. The EU has approved the RSB criteria as a recognized voluntary scheme, so that if producers adhere to these criteria, they also qualify for the EU criteria.[50]

The RSB criteria acknowledge the limitations of the producer-by-producer approach to evaluating complex issues like the food versus fuel problem 'since these macro-level impacts are likely to be beyond the control of the individual farmer or

[49] A Chakrabortty; E Rosenthal, above n. 10.
[50] RSB Press Release, 'RSB Recognised by the European Union as Proof of Compliance with the Renewable Energy Directive!' 19 July 2011.

biofuels producer seeking certification.' In response, they state that 'the criteria…aim to address only the direct activities that farmers and producers can undertake to prevent unintended consequences from biofuel production. The Steering Board recognizes that efforts to minimize these risks should also be taken by governments in their policies that affect land use, land protection, biofuel promotion, and food security, even beyond their national borders.'[51]

The RSB acknowledged the problem of individual versus macro effects without allowing it to prevent the development of a standard. Specifically, if biofuels may impact upon food supply, they must meet Food Security Assessment Guidelines. While these requirements do not address all of the problems of food versus fuel, notably the impact of biofuels on food prices, they address the problem at the level of individual operators.

RSB standards include guidelines about land rights, to ensure that people are not displaced in order to grow biofuels. There are also a number of criteria that deal with other social welfare impacts of biofuels, including principles on human and labor rights, rural and social development, local food security and land rights. These principles make consideration of social welfare impacts essential for biofuels to be considered sustainable. While this is a good example of stricter criteria, these are applied on a voluntary basis and thus are not subject to WTO law.

ii. Indirect Land Use Change

A second complex problem is that of Indirect Land Use Change ('ILUC'). This issue forms the focus of the next chapter. ILUC refers to increased biofuels production displacing crops into other areas, including into the ecosystems that the RED sets out to protect. This can result in increased carbon dioxide emissions from biofuels production, undermining the RED's fundamental purpose. In the RED, the EC committed to submitting a report to the Parliament and to the Council about how to incorporate methodologies to measure ILUC, specifying the deadline of 31 December 2010.[52] Though they outlined policy options in a report, EU bodies still have not agreed on a solution.

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[51] RSB Principles and Criteria for Sustainable Biofuel Production, Version 2.0, Roundtable on Sustainable Biofuels, Ecole Polytechnique Fédérale de Lausanne RSB-STD-01-001 (Version 2.0) RSB Principles and Criteria 05/11/2010, 4.

[52] RED, above n. 13, at para. 19(6); Preamble para 85.

The ILUC example reveals the interconnectedness of complexity and regulatory chill. Introducing complex burdens heightens the likelihood of a WTO dispute. For example, some countries have a higher proportion of high carbon lands. Singling out certain biofuels or feedstocks that contribute more to ILUC, one option the EU is considering, may be seen to discriminate against these countries. In general, trade-restrictive regulation that rests upon complex relationships between multiple variables seems more likely to prompt WTO conflict. This is a central theme of the next chapter.

3. 'Sustainability' as a regulatory concept

A. Sustainability and regulatory chill

By revising their regulation to make it more WTO-compatible, the EU showed implicit deference to its WTO law commitments. This was based on their own evaluation of their WTO obligations. Yet, it is also important to consider how the WTO dispute settlement bodies would strike the balance if EU criteria came into conflict with WTO law. Thus, the previous section focused on the influence of the WTO on the development of the criteria. This second section focuses on the concept of sustainability, what type of regulation it is likely to inspire, and what issues this might raise in the context of dispute settlement.

In assessing mutual supportiveness between sustainable development and trade liberalization, it is particularly significant to highlight legal issues that are closely linked to the nature of the concept itself. The question arises of whether 'sustainability' regulation is more likely to violate WTO law, or to give rise to trade concerns that lead to regulatory chill. In fact this is likely. Some of sustainability's core characteristics are complexity and conceptual breadth. This breadth makes it invasive and also amorphous. Regulating for 'sustainability' suggests consideration of more than one thematic area; otherwise a more specific term would be used. This is certainly true of the EU criteria, which address several subject areas. Even with the simplification of the concept of 'sustainability' the EU criteria present, they still have a deep regulatory reach.

This is illustrated by comparing the criteria with other environmental and public health regulations that the AB has considered in past disputes under Article

XX. In *US – Shrimp*, the regulation in dispute involved one regulatory measure, installing devices on fishing nets, which achieved the specific goal of preventing bycatch of an endangered species. In *EC – Asbestos*, the regulation applied only to one particular building material: carcinogenic asbestos. *Brazil – Tyres* also dealt with a product ban on one product, retreaded tyres. In contrast, biofuels sustainability criteria pursue biodiversity conservation, climate change prevention and 'sustainability', more broadly defined goals. Therefore, the cause and effect relationship between the criteria and their goals is more complex. From a trade perspective, this poses significant obstacles. It is difficult to establish a rigorous justification for such broad-reaching regulation solely based on their contribution to the abstract concept of sustainability.

B. A dispute on sustainability regulation

There has never been a WTO dispute about regulations that have sustainability as their specific goal or organizing principle. This is one reason why the self-proclaimed 'most comprehensive and advanced binding sustainability scheme of its kind anywhere in the world' forms an important case study.[53] As described in the previous chapter, arguably the most influential use of the term sustainable development in dispute settlement is in the Preamble of the WTO's founding agreement, which provides the undefined potential for influence in this context. In *US – Shrimp,* the Preamble was mentioned specifically in reference to the interpretation of Article XX(g)'s 'exhaustible natural resources.'

Particularly as these criteria set out to achieve sustainability, the Preamble might help to provide a legal basis for accepting the criteria. It provides conceptual support for sustainable development, but it is non-binding: a principle rather than a rule. The AB may take it into account when and how they choose. Thus, it is difficult to characterize its influence in general terms. Another way of approaching the question of the legal weight of sustainable development is through the GATT Article XX and TBT 2.2 'necessity' tests. However, before undertaking this analysis, it is necessary to address the issue of whether the TBT Agreement is applicable to biofuels sustainability criteria.

[53] Communication from the Commission on the practical implementation of the EU biofuels and bioliquids sustainability scheme and on counting rules for biofuels, OJ 19.6.2010 C 160/8, Section 1.

C. Applicability of the TBT Agreement to EU Biofuels Sustainability Criteria

The TBT Annex 1.1 states that a technical regulation is a:

> *Document which lays down product characteristics or their related processes and production methods, including the applicable administrative provisions, with which compliance is mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method.*[54]

Whether EU biofuels sustainability criteria are technical regulations under the TBT is somewhat of an open question. The issue has attracted controversy among WTO Member States. Under the TBT Agreement, WTO Member States must notify other Members of any technical regulation that does not simply reflect a relevant international standard. While the EU notified other Members of its intent to introduce regulations specifying renewable energy targets, they neglected to include biofuels sustainability criteria, as they did not believe the TBT Agreement was applicable.[55] In response to the notification, Australia submitted a request for information about several aspects of the regulation, focusing on the sustainability requirements for biofuels.[56] Australia's request called into question the EU's conclusion that the TBT Agreement did not apply.

To evaluate the applicability of the TBT, the dispute settlement bodies in *EC – Asbestos* set out a three-tier test that expands upon the definition of a technical regulation laid out in TBT Agreement's Annex 1.1. This test was applied in all three recent TBT disputes:

> *... First, the document must apply to an identifiable product or group of products. The identifiable product or group of products need not, however, be expressly identified in the document. Second, the document must lay down one or more characteristics of the product. These product characteristics may be intrinsic, or they may be related to the product. They may be prescribed or imposed in either a positive or a negative form. Third, compliance with the product characteristics must be mandatory."*[57]

When applying the first component of the test, there is little ambiguity: the Directive itself clearly identifies the products as biofuels and bioliquids. The second and third components are less clear.

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[54] Agreement on Technical Barriers to Trade ('TBT Agreement'), Annex 1.1, above n. 15, at 137.
[55] World Trade Organization, Committee on Technical Barriers to Trade, 11 June 2008, G/TBT/N/EEC/200.
[56] TBT notification G/TBT/N/EEC/200, Proposal for a Directive on the promotion of the use of energy from renewable sources, Comments from Australia, 3 October 2008.
[57] WTO Appellate Body Report on European Communities – Measures Affecting Asbestos and Asbestos-Containing Products *(EC-Asbestos)*, WT/DS135/AB/R, adopted 12 March 2001, paras. 66-70.

There has been some uncertainty about whether TBT 2.1 applies to NPR PPMs. In their analysis of TBT applicability, Mitchell and Tran[58] questioned the sustainability criteria's adherence on this basis. Though Annex 1.1 specifies 'related process and production methods', they pointed out that this may only refer to those that influence product characteristics. They argued that the negotiating history of the TBT Agreement, and the lack of precedent, suggests that a sustainability regulation based upon NPR PPMs would not be considered as a 'product characteristic'. Thus, they concluded that the TBT Agreement would probably not apply to the land-use based aspects of the criteria; on the other hand, emissions-related criteria would fall within the definition of Annex 1.1.[59] In other words, while PPMs are permissible, NPR PPMs (based upon the process of production, and invisible in the final product) are not.

With respect to the third component, whether regulations are mandatory, some interpretation is also required. Technically, the regulations are voluntary. They stipulate minimum criteria that must be met for biofuels to qualify for EU price supports, and to count toward the 10 per cent renewable energy target, but they do not prevent imports of non-compliant biofuels. The EU has suggested that the TBT Agreement is not applicable because the criteria are voluntary,[60] a point which formed a key component of their response to Australia's request for information.[61]

The *US – Tuna II* TBT dispute provides a precedent that refutes both of these arguments, suggesting that the TBT Agreement would apply to biofuels sustainability criteria. This dispute concerned a NPR PPM-measure: a label for dolphin-safe tuna that could only be applied if the tuna were caught without setting on dolphins. The AB Report stated that making a determination about whether the TBT Agreement applies depended upon the measure's particular circumstances and features.[62] They

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[58] A Mitchell and C Tran, 'The Consistency of the EU Renewable Energy Directive with the WTO Agreements', Georgetown Law Faculty Working Papers, Georgetown Business, Economics and Regulatory Law Research Paper No. 1485549, October 2009, 10 – 11.
[59] Ibid at 11.
[60] A Lendle and M Schaus, 'The EU's Renewable Energy Directive – consistent with WTO rules?' Trade Law Clinic 2010, Graduate Institute of International and Development Studies, Geneva, 15, http://graduateinstitute.ch/ctei/home/working_papers.html (visited 15 May 2012).
[61] Reply from the EC TBT Enquiry Point to Questions Received from Australia Relating to Notification G/TBT/N/EEC/200, Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources.
[62] WTO Appellate Body Report on United States – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products *(US – Tuna II)*, WT/DS381/AB/R, adopted 16 May 2012, at para. 190.

did not specifically raise the question of whether product characteristics included those based upon PPMs. However, their determination that the TBT Agreement was applicable achieved this clarification.

The Panel's description of the relevance of the TBT Agreement, which the AB did not overrule, focused on the fact that the measure in dispute was a labelling requirement as specified in the second sentence of Annex 1.1. They then concluded that it did have to do with a product, process or production method.[63] Biofuels sustainability requirements are not, strictly speaking, a labelling requirement; thus, the argumentation would differ slightly. However, this distinction is likely not that significant. The key question is whether NPR PPMs can be considered product characteristics; this dispute demonstrates that there is no inherent obstacle.

Further, at the centre of the *US – Tuna II* dispute was a measure that was clearly voluntary. Producers could choose whether to comply with the criteria for the 'dolphin safe' label. Yet US Federal law established this criteria. As there were no legal alternative definitions on the US market, the AB considered the requirement to be mandatory.[64]

The dolphin-safe label could be considered even more 'voluntary' than the sustainability criteria. The only mandatory aspect of the dolphin-safe label was its minimum compliance criteria. The EU sustainability criteria also establish mandatory minimum compliance criteria. Additionally, the RED contains another mandatory component: a legal provision that 10 per cent of energy be sourced from renewable sources. The EU does not proscribe the means by which Member States should achieve this target; nonetheless it is binding. On this basis, the *US – Tuna II* precedent suggests that biofuels sustainability criteria certainly would be considered *de facto* mandatory. The conclusion that the TBT Agreement applies forms the basis for the subsequent analysis.

D. GATT Article XX/TBT Article 2.2 and the necessity test

i. Article XX

[63] WTO Panel Report, United States – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products *(US – Tuna II)*, WT/DS381/R, adopted 15 September 2011, at paras. 7.74, 7.76 and 7.79.
[64] *US – Tuna II,* above n. 62, at para. 199.

The terms 'necessary' and 'relating to' occur in all of the Article XX subparagraphs quoted above, and have to do with the relationship between the measure in dispute and the objective it pursues. This chapter will focus primarily on the concept of 'necessity'. Article XX provides an exception to the GATT when a measure pursues certain public policy objectives recognized as vital by all WTO Members. Yet some tension arises as the evaluation of Article XX compliance depends on the judgment of the dispute settlement bodies. Empowering them to make such determinations has been politically sensitive.[65] Thus, the interpretation of 'necessary' raises the larger issue of the regulatory freedom that the WTO system should provide. The fundamental issue is: who decides what is 'necessary'?

GATT Panels historically aimed to resolve this tension by making clear that the level of regulation a Member State wished to achieve would be respected, as long as they achieved this goal by the least GATT-inconsistent means reasonably available.[66] This approach avoids questioning the validity of a government's regulatory goal, but instead focuses on the means by which it is achieved. However, maintaining deference to the desired level of enforcement while at the same time questioning the approach to achieving this level is difficult. Past disputes demonstrate that the dispute settlement bodies have indeed reformulated the desired level of protection, or second-guessed a Member State's intention in setting that level, in the process of evaluating the measure's trade-restrictiveness.

In the GATT dispute *Thailand – Cigarettes*,[67] Thailand argued that their import ban on cigarettes was necessary to protect human health, and therefore justified under Article XX(b), which deals with measures necessary to protect human life or health. Thailand's goal was to reduce levels of smoking. The Panel found that other, GATT-*consistent* measures were reasonably available to achieve this goal, principally banning cigarette advertisements.[68] However, Thailand had stated clearly that banning advertising would be ineffective. To prove this point, they referred the Panel to the World Health Organization, which supported Thailand's conclusion that

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[65] A Desmedt, 'Proportionality in WTO Law' (2001) 4(3) *Journal of International Economic Law*, 441 – 480.

[66] *United States – Section 337 of the Tariff Act of 1930*, BISD 365/345, adopted 7 November 1989, para. 5.26, articulates this approach, which was also applied in Thailand – Restrictions on Importation of and Internal Taxes on Cigarettes *(Thailand – Cigarettes)*, BISD 37S/200, adopted 7 November 1990, and WTO Appellate Body Report on United States – Standards for Reformulated and Conventional Gasoline *(US-Gasoline)*, WT/DS2/AB/R, adopted 29 April 1996.

[67] *Thailand – Cigarettes,* ibid.

[68] Ibid at para. 78.

opening the market to imported cigarettes would likely lead to increased levels of smoking, even if advertising were banned.[69]

The Panel focused on the means by which the regulatory goal was achieved (an import ban), rather than challenging the legitimacy of the goal itself (reducing smoking). Nevertheless, the impact of the Panel's recommendation was to second-guess Thailand's judgment that banning advertising would be ineffective. This example demonstrates the difficulty of maintaining deference while at the same time reducing the trade-restrictiveness of the approach.

The 2000 dispute *Korea – Beef* also illustrates the difficulty. The dispute focused on Korea's 'dual retail system' for beef, in which imported and domestic beef were sold in separate stores. Korea stated that this system fell under the purview of Article XX(d), which deals with 'the prevention of deceptive practices'.[70] Korea stated that its intent in separating domestic and imported beef was to *eliminate* the deceptive practice of consumer fraud resulting from the mislabelling of imported beef as domestic, and vice-versa. The AB argued that, if their intent was to do this, they should have instituted a total ban on imports of beef. Therefore, the AB concluded that their regulatory intent must have been considerably reducing fraud; they could achieve this through less trade restrictive means.[71]

Unlike in *Thailand – Cigarettes*, the AB approach was not to propose alternate, less trade-restrictive means to their regulatory goal, which implicitly lowered the desired level of regulation. They recognized that Korea was entitled to set the level of regulation it desired, but argued that it did not actually intend this level.[72]

In the dispute, the AB introduced a new approach to 'necessity': a test that consisted of 'weighing and balancing' different elements. The first element was 'the relative importance of the common interests or values that the law or regulation to be enforced is intended to protect', so that 'the more vital or important those common interests or values are, the easier it would be to accept as 'necessary' a measure designed as an enforcement instrument.'[73]

The latter two elements were more or less equivalent to the previously

[69] Ibid at para. 27 (Thai submission); 55 (WHO analysis).
[70] Marrakesh Agreement, Article XX(d), above n. 15, at 455.
[71] WTO Appellate Body Report, Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef *(Korea – Beef)*, WT/DS169/AB/R, adopted 11 December 2000, paras. 175 – 178.
[72] Ibid.
[73] Ibid.

established approach. The first was an evaluation of the extent to which the trade-restrictive measure contributed to the realization of the ends pursued; the second was whether less trade-restrictive means were reasonably available to achieve the same goal. The AB also set out a stronger emphasis on the concept of balancing with regard to these elements, stating that a measure with 'a relatively slight impact on imported products might more easily be considered 'necessary' than a measure with intense or broader restrictive effects.'[74]

The two established components of the necessity test relate more directly to the self-evident question of whether the measure in dispute is 'necessary' to achieve the objective in question. The three-part necessity test, however, introduced a new dimension, which expanded the purview of the judicial review. The new element formalized a consideration of the importance of the value being pursued. It required a wider degree of questioning, arguably falling outside the wording of the necessity test itself, which is focused on the measure's contribution to a goal.[75] Allowing Member States to determine the level of protection, while simultaneously sitting in judgment of the regulatory values they are trying to achieve, seems contradictory. Further, the dispute settlement bodies may not have the necessary expertise to evaluate the importance of different regulatory objectives. The approach thus posed a deeper challenge to national sovereignty.

Interestingly, however, though they introduced this component in *Korea – Beef*, the AB did not discuss how the importance (or lack thereof) of consumer fraud influenced their decision. Instead, they stated that this determination could be 'comprehended in the determination of whether…a less WTO-inconsistent measure is 'reasonably available''.[76] As previously described, their decision thus first focused on lowering Korea's desired level of protection to 'considerably reducing' fraud. Once they had done this, they then established that less trade-restrictive measures were reasonably available to meet this lower level.

This decision thus confusingly conflated the established GATT approach with the new approach the AB itself introduced. On the one hand, they introduced an element of weighing and balancing the importance of the value at stake. However,

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[74] Ibid.
[75] *See* G Kapterian, 'A Critique of the WTO Jurisprudence on Necessary' (2010) 59(1) *International and Comparative Law Quarterly*, British Institute of International and Comparative Law, 91.
[76] *Korea – Beef*, AB Report, above n. 71, at para. 166.

they did not make an explicit conclusion about this, but based their decision on a more traditional analysis. This raises the question of why it was necessary to introduce this first variable, and whether and how it influenced their decision.

They also carefully delimited the applicability of the evaluation of the importance of the value at stake, connecting it only to certain disputes, and limiting it to XX(d).[77] However, the three-step 'weighing and balancing' approach was applied in future disputes, including the 2001 *EC – Asbestos*[78] and the 2007 *Brazil – Tyres,*[79] in both cases under Article XX(b). In contrast to *Korea – Beef*, both did include a direct consideration of the value at stake, in both cases affirming its importance, with reference to international standards.[80] In these disputes, at the same time as evaluating the legitimacy of the regulatory goals, the AB maintained its seemingly contradictory position that Member States have the right to determine the level of protection that they wish to achieve.[81]

In *EC – Asbestos*, for example, the regulatory goal of France, the defending country, was to 'halt' the spread of asbestos-related health risks.[82] The means for achieving this goal was an import ban. In this dispute, the AB cited the World Health Organization to affirm the fact that asbestos was harmful to human health, and also supported the legitimacy of the import ban.

The EC had followed the approach that the AB stated would have been logically consistent in *Korea – Beef*: an import ban. Following the AB's reasoning, this would have been the only measure consistent with the aim of *complete elimination* of consumer fraud. This logic might be extended to France's import ban on asbestos. Indeed, the AB in *EC – Asbestos* found that France's import ban was consistent with their aim of halting asbestos-related health risks. The underlying supposition is that, when a country desires a high level of protection against a harm associated with a traded good, they must institute a severely trade-restrictive measure. This remains value-neutral: the gravity of the harm is based solely on a government's judgment.

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[77] Ibid at para. 162.
[78] *EC – Asbestos,* above n. 57.
[79] WTO Appellate Body Report, Brazil – Measures Affecting Imports of Retreaded Tyres *(Brazil – Tyres)*, WT/DS332/AB/R, adopted 3 December 2007, paras. 139-143, 156.
[80] *EC – Asbestos*, above n. 57, at para. 168; *Brazil – Tyres,* ibid at paras. 21, 121.
[81] *Korea – Beef*, AB Report, above n. 71, at paras. 178-180; *EC – Asbestos*, above n. 57, at para. 168; *Brazil – Tyres*, above n. 79, at paras. 56 – 57, 65.
[82] As paraphrased by the AB, *EC – Asbestos*, above n. 57, at para. 168.

Following this logic, if Korea had instated an import ban on beef, their measure would have been consistent with their desired level of regulation, and therefore WTO-compliant. However, this supposition is logically circular. An import ban is far more trade-restrictive than Korea's disputed approach of separating beef into different retail outlets. Considering that Korea produced and sold beef domestically (unlike France, which also had an asbestos ban at home), such a ban would constitute formal discrimination. The AB reasoned that Korea did not take an extremely WTO-illegal measure, not because it would be certain to give rise to a WTO dispute, but because they did not wish to eliminate fraud.

One possible reason why an evaluation of the importance of the value at stake featured more explicitly in later disputes than in *Korea – Beef* is that the AB later agreed with this importance. Disagreeing with regulatory values confirms fears of WTO judicial activism, while affirming their importance shows the desired deference to national sovereignty, even if this determination is derived from international standards. If this is the case, the implicit reasoning might have been that negative trade impacts of Korea's dual retail system outweighed their positive contribution to preventing consumer fraud, as it was not a compelling enough regulatory value to justify such restrictions. This could be contrasted with *EC – Asbestos* and *Brazil – Tyres*, in which the value in question was human health, which they found more compelling.

This brief review serves to outline some questions of importance in a dispute on sustainability regulations: what is the precise regulatory intent, how well do the regulations fulfil this intent, and what is the importance of the value at stake? These disputes demonstrate the difficulty of allowing national regulatory discretion to achieve non-trade goals whilst maintaining WTO obligations. They also demonstrate that the AB's determination of the importance of the value at stake is a controversial factor, which has both explicit and also perhaps implicit influence in the their deliberation of a dispute.

ii. TBT 2.2

TBT 2.2 reads:

> *Members shall ensure that technical regulations are not prepared, adopted or applied with a view to or with the effect of creating unnecessary obstacles to international trade. For this purpose, technical regulations shall not be more trade-restrictive than necessary to fulfil a legitimate objective, taking account of the risks non-fulfilment would create. Such legitimate objectives are, inter*

> *alia: national security requirements; the prevention of deceptive practices; protection of human health or safety, animal or plant life or health, or the environment. In assessing such risks, relevant elements of consideration are, inter alia: available scientific and technical information, related processing technology or intended end-uses of products.*[83]

While GATT Article XX is an exception, TBT 2.2 is part of an integrated Agreement. This is an important distinction. If a measure conformed with GATT Articles I or III(4), there would be no violation, and thus no need to apply the exception of Article XX. On the other hand, a measure may comply with TBT 2.2 and still violate TBT 2.1. Moving beyond the rule/exception model of the GATT places more weight on the importance of legitimate policy goals as a fundamental component of determining a violation. However, this structure extends the influence of the provision to include measures that comply with the NTP: *all* technical measures must be the least trade-restrictive necessary to fulfil a legitimate objective. In this sense, the TBT Agreement is more intrusive with respect to domestic regulatory autonomy.[84]

Also, while Article XX contains a limited and exhaustive list of subparagraphs identifying negotiated exceptions, TBT 2.2 covers any 'legitimate objective'. The AB stated in *US – Tuna II* that they must independently assess a Member State's regulatory objectives, rather than taking their stated intent at face value.[85] The interpretation of this obligation contains parallel elements to the Article XX 'necessity test'. Affirming these parallels, the Panel in *US – Clove Cigarettes* relied upon jurisprudence under Article XX(b) when evaluating a TBT 2.2 dispute. They justified their position based upon similarities in wording between the TBT Agreement's Preamble and Article XX, and a negotiation history which suggested that the TBT Agreement was a development of the GATT.[86] This ruling was not appealed.

In *US – Tuna II*, the AB further elaborated on the TBT necessity test:

> *In the context of Article 2.2, the assessment of 'necessity' involves a relational analysis of the trade-restrictiveness of the technical regulation, the degree of contribution that it makes to the achievement of a legitimate objective, and the risks non-fulfilment would create.*[87]

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[83] Agreement on Technical Barriers to Trade ('TBT Agreement'), Article 2.2, above n. 15, at 122.
[84] M Ming Du, 'Domestic Regulatory Autonomy under the TBT Agreement: from Non-Discrimination to Harmonization', (2007) 6 (2) *Chinese Journal of International Law* 269 – 306, http://chinesejil.oxfordjournals.org/content/6/2/269.full#xref-fn-42-1 (visited 20 June 2012).
[85] *US – Tuna II*, above n. 62, para. 314.
[86] *US – Tuna II*, above n. 63, at paras. 7.357 – 7.361.
[87] *US – Tuna II*, above n. 62, at para. 318.

The AB further stated that there should be 'an element of weighing and balancing' in this determination, and that the AB should consider whether a reasonably available less trade-restrictive measure would make an equivalent contribution to the legitimate objective.[88] Thus this interpretation of the TBT necessity test includes the same elements as the necessity test under Article XX, except that rather than the importance of the value at stake the AB considers the risk of non-fulfilment.

E. Relevance of the XX subparagraphs/TBT 2.2 to labour standards

One way to evaluate the EU criteria as 'sustainability' regulation is to consider hypothetical 'EU – Biofuels' dispute focusing on non-binding criteria, but imagining it was binding. As noted, labour standards were included in the criteria, but only through requiring trade partners to belong to relevant international conventions like the International Labour Organization. The case for binding criteria has been argued. For example, the Swiss Confederation released an issue paper that included this analysis:

> *Biofuels have the potential to create jobs in rural areas, but a large share of these jobs will only be for low-skilled seasonal agricultural workers. These workers, who are often migrants, are especially vulnerable. There are still too many reports of forced labor, child labor and dangerous working conditions in sugarcane fields and processing facilities…. Social criteria including better working conditions should be a component of the standards for biofuel production and trade.*[89]

There was no reason to believe this was identified in the EU as one of the more urgent concerns; for example, the Parliament did not include labour standards in their draft criteria. Yet, precisely because it is somewhat of an outlier, it makes a useful hypothetical example. A defence of labour standards on the part of the EU raises particular questions about the notion of 'sustainability' regulations: what territory they cover, and on what basis these regulatory decisions are justified.

While they are not listed as a specific Article XX exception, labour standards fall within the purview of several of the existing subparagraphs listed above, including (a), (b), (d) and (e). Regarding Article XX(a), on public morals, precedent suggests that the concept is interpreted broadly in the WTO context.[90] Demonstrating

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[88] Ibid at para. 321.
[89] 'Issue Paper: Biofuels, Opportunity or Threat to the Poor', Swiss Agency for Cooperation and Development – Natural Resources and Environment Division, Schweizerische Eidgenossenschaft, July 2007, 9.
[90] WTO Appellate Body Report, United States – Measures Affecting the Cross-Border Supply of

the EC's own perception of the wide applicability of the concept of public morals, the Renewable Energy Directive itself states that 'the consumers in the Community would… find it morally unacceptable that their increased use of biofuels…could have the effect of destroying biodiverse lands.'[91] Given the EC's attention to WTO law while crafting the RED, this statement seems to invoke a defence under Article XX(a).[92] Yet, if morality justifies biodiversity preservation, certainly it is as applicable to labour standards.

Another obvious defence for labour standards is Article XX(b), on human life or health. This subparagraph is not specifically limited to domestic impacts, nor does it preclude a consideration of labour standards being the cause.[93]

Article XX(d), which deals with measures that prevent deceptive practices, is also relevant, in the context of consumer perceptions. If biofuels are labelled as sustainable, this might suggest to consumers that they incorporate labour standards. Article XX(e) deals with measures relating to prison labour, a requirement which might provide scope for regulations to prevent the worst of the worst labour conditions.

There would also be scope for the inclusion of social welfare-related objectives in the TBT Agreement's Article 2.2, a provision which contains similar elements to Article XX's 'necessity' test. As TBT 2.2 simply indicates that the policy objectives behind a measure must be 'legitimate', there is no prohibition against including labour standards.

F. Applying the necessity test: determining regulatory intent

All of the above Article XX subparagraphs as well as TBT 2.2 contain the term 'necessary'. A core component of determining 'necessity' under both Article XX and TBT 2.2 is through evaluating the contribution of the measure to the ends pursued. One possible approach would be for the EU to argue that high labour standards are an integral component of the concept or definition of sustainability, its stated regulatory

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Gambling and Betting Services *(US – Gambling)*, WT/DS285/AB/R, adopted 7 April 2005, paras. 296-303; WTO Panel Report on China – Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products *(China – Periodicals)*, WT/DS363/R, adopted 12 August 2009, and Appellate Body Report WT/DS363/AB/R, adopted 21 December 2009.

[91] RED, above n. 13 at Preamble, para 69.

[92] F Ortino for Oxfam International on the legal viability of social standards for biofuels, unpublished paper.

[93] Ibid.

goal. As the EU is extending financial support to biofuels producers, and creating a larger market, consumers may reasonably assume a greater interest in production conditions. Creating sustainability criteria suggests that negative impacts have been mitigated.

As discussed in the previous chapter, common international law definitions of sustainable development emphasize three components, including social welfare.[94] Further, previously quoted EU statements on sustainable development include a recognition of social welfare issues. Along these lines, it could be argued that labour standards are fundamental aspect of social welfare, and thus must be represented.

The *US – Tuna II* dispute provides useful comparative example. In this dispute, in the context of TBT 2.2, the dispute settlement bodies identified consumer information as one of the two major objectives of the measure. Specifically, consumers should not be misled or deceived about whether dolphins were adversely affected by tuna products. The US 'dolphin safe' label, though voluntary, was backed by a US law stipulating certain requirements, including that tuna within the Eastern Tropical Pacific ('ETP') could not be caught by setting on dolphins. The AB compared the US 'dolphin safe' requirement with an international voluntary label which did not contain this specification. The AB concluded that the US label better contributed to its consumer information objective as the international label may have allowed more harm to dolphins.[95] Similarly, the EU might argue that consumers would be deceived if their definition of 'sustainability' did not include labour standards.

Indeed, a joint NGO letter critiqued the EU's omission of social welfare criteria on these grounds. The letter, signed by representatives of fifteen global organizations working on social and environmental issues, including Friends of the Earth, Bread for the World and Wetlands International, stated that:

> *The Commission's proposals only specify criteria for 'environmental' sustainability, despite the widely recognised Brundtland [international law] definition that includes environmental, social and economic components. The draft text does not provide any safeguards to protect people, particularly in the Global South, from the negative impacts of biofuel production. We believe that the omission of social criteria also contradicts EU policy as set out in the*

[94] *See, eg*, *Plan of Implementation* (2002) United Nations, World Summit on Sustainable Development, at I. Introduction, para. 2, http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIToc.htm (visited 15 November 2011).
[95] *US – Tuna II*, above n. 62, at para. 324.

context of promoting sustainability and social rights, e.g. in Council Regulation (EC) No 980/2005 of 27 June 2005 [on the EU's generalized tariff preferences]. Therefore, by failing to include social criteria, the Commission's proposals inevitably fall short of the member states' requirements.[96]

More generally, from a WTO perspective, it is significant to understand whether social welfare is part of the definition of sustainable development, particularly as it is a WTO treaty term. If it is integral to sustainable development, then, via the term's inclusion in the Preamble, this could provide a source of institutional support for labour standards. Sharpening the definition would also mean that such omissions would better stand out.

Yet the interpretation of what constitutes 'social welfare' and how it balances with sustainable development's other pillars will vary vastly between WTO Members, and seems difficult to translate into specific shared guidelines. Developing countries in particular have resisted the range of trade-restrictive regulations that might be justified in the name of sustainability, arguing that they should not be forced to make sacrifices to solve problems they did not create.[97] In this regard, social welfare, and specifically labour standards, are a particularly controversial area, suggesting that the EU's omission may in part reflect this broader institutional ambivalence.

The concept of sustainability is so broad that it intensifies questions about deference. Can the EU effectively justify a regulation by stating that it forms a part of its interpretation of 'sustainability'? If it did, it would provide a vast free zone for trade-restrictive regulations. This suggests that it is the term's scope, and its implications for empowering regulation, that has limited its legal influence in the WTO more generally.

Indeed, the breadth of sustainable development gives rise to particular legal issues in the context of EU biofuels sustainability criteria. One such issue is drawing the boundary of the term's applicability. It seems difficult to justify the logical consistency of applying such regulations solely to biofuels. In *Korea – Beef*, the Panel pointed out that Korea did not apply its dual-retail system to other meat products, such as pork and seafood. Instead, these were regulated using less trade-restrictive means. They reasoned that, as these products were 'like or at least similar', this cast

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[96] 'Re: social standards for the sustainability criteria for biofuels', Joint NGO letter to the ad hoc working group, signed 25 March 2008.
[97] *See* GP Sampson, *The WTO and Sustainable Development* (Tokyo: United Nations University Press, 2005) 20-21.

doubt on the necessity of applying such a trade restrictive approach solely to beef.[98] Similarly, the AB might contend that, if the EU really intended to regulate labour standards in biofuels production, the criteria should apply to all imports. It might be difficult to justify why labour standards are so crucial to biofuels production and not to other agricultural products, or products in general. On this basis, as in *Korea – Beef*, they could second guess the EU's desired level of regulation.

This points to the importance of discerning a more specialized regulatory intent. One way of doing this is to consult the RED, of which the sustainability criteria form just one part. The RED's Preamble specifies that its general objective is to mitigate climate change.[99] It also states that the development of renewable energy should be 'closely linked to increased energy efficiency.'[100] If the EU were to include biofuels that contribute to global warming, it would sabotage the RED's purpose. Therefore, emissions-savings criteria are fundamental to the EU's intent, as they prevent perverse impacts.

Unlike emissions criteria, labour standards cannot be attributed so directly to the aim of the RED as a whole. Also, there is no WTO precedent for associating sustainable development with social welfare objectives. However, there is a precedent for the AB to associate sustainable development with species conservation, and to affirm the legitimacy of this regulatory goal. The AB cited the Preamble's statement on sustainable development to justify a broad interpretation of Article XX(g)'s 'exhaustible natural resources'.[101] While this does not exclude the association of sustainability with other regulatory objectives, it does prove that the AB considered biodiversity as part of sustainable development.

Underlying the lack of precedent is widespread rejection among developing countries of labour standards as a unilateral basis for disciplining trade in the WTO framework. Given disagreement in the WTO, supporting unilateral labour standards may be a precedent that the AB would establish with caution. If the EU omission resulted not from conscious regulatory choices, but rather a chilling effect from WTO law, it should be subject to critique on these grounds. Yet, regardless of the EU's

[98] *Korea – Beef*, above n. 71, at paras. 168-172.
[99] RED, above n. 13, at Preamble, paras. 1 – 2.
[100] Ibid at Preamble, para. 5.
[101] *US – Shrimp*, above n. 37, at paras. 152, 153, 155.

intent, evaluating their role in a potential dispute is still useful as it crystallizes some of the legal problems raised by the breadth of the concept.

The necessity test under Article XX also requires considering the importance of the value, while under TBT 2.2 the AB must recognize the 'legitimacy' of the regulatory goal at stake. Under both the AB assesses whether other, less trade restrictive measures are reasonably available. Labour standards are internationally recognized as important. However, they are a broad-based goal. International standards help to affirm the importance of regulatory values, as they ensure that they stem from multilateral objectives. As yet, there are no such international agreements on labour standards that focus on biofuels, providing guidance on how the issue should be defined and addressed.

Further, there is the question of how, exactly, the EU would develop and enforce specific guidelines on labour. The EU's current approach is to ensure that their trade partners have signed up to relevant international agreements. It is also an approach that has minimal trade impacts, and is much less invasive than conditioning imports on meeting certain standards. Thus, this approach would be a less trade restrictive means to achieving the ends of respecting international labour standards. In summary, in the event of a clash of norms between EU and international standards, it seems unlikely that the regulation would be affirmed solely because it constituted the important value of sustainability. This provides an important reflection on the limits of sustainability as a legal concept, particularly those deriving from its conceptual breadth.

G. Article XX/TBT 2.2 and existing sustainability criteria

The RED has several core provisions. It stipulates that biofuels must represent significant (and rising) emissions savings when compared with fossil fuels. It identifies areas of high biodiversity: primary forest, nature protection areas and highly biodiverse grassland. It also identifies areas of high carbon stock: wetland, continuously forested areas, and peat land. It specifies that biofuels crops should not be grown in these areas. As documented, foreign biofuels producers have already raised concerns about the structure of the criteria. If sustainability criteria were found not in compliance with GATT or TBT 2.1, then the AB would consider their compliance with Article XX or TBT 2.2, respectively.

i. Article XX

Sustainable development is not listed, *per se*, as an Article XX exception. The regulatory goals of the criteria would need to be adapted to existing subparagraphs. The most clearly relevant subparagraphs are Article XX(b) on measures 'necessary to protect human, animal or plant life or health' and Article XX(g) on measures 'relating to the conservation of exhaustible natural resources.' The first step is to determine the regulatory objective at stake and the applicability of the listed exceptions. The AB must then establish whether the specific requirements of the subparagraph have been met. Finally they evaluate the measure's compliance with the chapeau.[102]

a) Article XX(b)

Both the emissions and the land use criteria have to do with the protection of human, animal or plant life or health. Emissions criteria aim to prevent climate change and its negative health impacts to all life; the same argument applies for the land-use criteria that prohibit biofuels being grown in areas of high carbon stock. Similarly, land-use criteria that aim to protect biodiversity equate with the protection of animal and plant life.

Under the established approach, the AB would apply the 'necessity' test, evaluating the importance of the common value at stake, the contribution of the measure to the regulatory goal, and the reasonable availability of other less trade restrictive measures to achieve the same level of protection.

Again, a preliminary issue is the extent to which the fact that the regulations pursue 'sustainability' would provide a compelling defence in this context, given the role of the concept as a treaty term. In *Brazil – Tyres*,[103] the AB based their assessment of the importance of the value at stake on international agreements and international standards relevant to a particular issue in dispute. It is interesting to note that the international standards that justify sustainable development's importance are not very targeted compared to some of the other goals represented by the Article XX exceptions. For example, in *EC – Asbestos*, the AB cited specific language in the World Health Organization about the product in dispute (asbestos).[104]

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[102] 'GATT/WTO Dispute Settlement Practice Relating to GATT Article XX, paragraphs (b), (d), and (g)', World Trade Organization, Committee on Trade and Environment, WTO/CTE/W/203, 8 March 2002, 6-10.
[103] *Brazil – Tyres*, above n. 79, at paras. 21 and 121.
[104] *EC – Asbestos,* above n. 57, at para. 162.

No major standard-setting bodies, such as the International Standards Organization, have formulated biofuels sustainability standards. Neither are there established international agreements. Broader agreements that deal with sustainability in general are not particularly helpful. For example, consulting the WSSD Plan of Implementation yields contradictory results. The text states both that sustainable development should be implemented, and also, that unilateral trade measures should be avoided.

The more vague the relevant norms, the more subjective, and therefore controversial, value judgments of their importance will appear.[105] For this reason, the EU might be better served by focusing on greenhouse gas emissions savings and biodiversity conservation as the aims of the criteria. These are both stated as goals in the RED's Preamble.[106] These international standards are more targeted than those that support 'sustainability'. This suggests that, as in the case of labour standards considered above, sustainable development may not be particularly legally influential in this circumstance, due to the concept's breadth and vagueness.

In the second step of the necessity test, the AB evaluates the contribution of the measure to the achievement of these objectives. In this context, as in the labour standards example, the question may arise of why biofuels have been singled out for a particularly high standard. Yet the emissions criteria contribute significantly to the EU's objectives by ensuring that the RED does not have a perverse impact on global warming. In this sense they are imperative. Biodiversity conservation does not seem as conceptually central in this sense, although there may be overlap in that the preservation of ecosystems identified in this criteria, such as primary forest, also reduces climate change. Therefore, as in the example of labour standards, the question may arise of how well particular components of the criteria contribute to the RED's overall goals, irrespective of their contribution to the achievement of 'sustainability'.

If sustainability were to take on an independent legal weight in this context, it might assist in the justification of biodiversity criteria. There is already a proven association between biodiversity and sustainable development. In *US – Shrimp*, the AB called upon the Preamble to justify a broader interpretation of Article XX(g) to include biodiversity conservation. A similar defence might take place in this context.

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[105] E Vranes, *Trade and the Environment: Fundamental Issues in International Law, WTO Law, and Legal Theory* (Oxford: Oxford University Press, 2009) 155.
[106] RED, above n. 13, at Preamble paras. 69 – 70.

When evaluating the reasonable availability of less trade-restrictive measures, the AB stated in *Brazil – Tyres* that an import ban might be considered necessary; however, a measure so severe would need to make a material, rather than marginal, contribution to the achievement of the objective.[107] In other words, the contribution of the regulation to the achievement of the regulatory goal is weighed against its trade restrictiveness: the most restrictive measures must contribute the most.

The EU has not put in place an import ban, so the criteria are not maximally trade restrictive. Their contribution to the EU's objective seems safely more than 'marginal'. However, the criteria are more trade-restrictive than their formally voluntary status would imply. A less trade-restrictive approach would be more similar to the EU's approach to social welfare criteria such as labour standards. It might be based upon trade partners having signed relevant international treaties, or having in place national regulation of sustainability impacts. The AB's interpretation seems somewhat of an open question.

b) Aricle XX(g)

Both emissions and land use criteria can be seen as 'relating to the conservation of exhaustible natural resources'. In *US – Gasoline*, the Panel agreed that clean air was an exhaustible natural resource.[108] The EU could use a similar argument that a global environment free of catastrophic climate change is an exhaustible natural resource that ILUC criteria help to protect. With respect to the land-use criteria, the justification for protecting species endangered by agricultural conversion would parallel *US – Shrimp*.[109]

The language of Article XX(g) differs from Article XX(g) in that instead of 'necessary' measures, it deals with measures 'relating to' the regulatory goals. The difference between 'necessary' and 'relating to' is relevant when establishing the relationship between the measure at issue and the objective pursued. During the GATT era, 'relating to' was interpreted to mean 'primarily aimed at';[110] more recent jurisprudence in *US – Shrimp* has supported this interpretation, further clarifying it to

[107] *Brazil – Tyres*, above n. 79, at paras. 150 – 151.
[108] WTO Panel Report on United States – Standards for Reformulated and Conventional Gasoline, *(US – Gasoline)*, WT/DS2/R, adopted 29 January 1996, at para. 6.37.
[109] *US – Shrimp*, above n. 37, at para. 128.
[110] GATT Panel Report, Canada – Measures Affecting Exports of Unprocessed Herring and Salmon *(Canada – Herring and Salmon)*, L/6268, Adopted 22 March 1998, BISD 35S/98, para. 4.6.

mean a direct connection or substantial relationship.[111] This is an easier condition to meet than those imposed by the necessity test. Reid has stated that '[t]his unquestionably amounts to a very light touch review of the exercise by a Member of its regulatory autonomy'.[112]

Similar to 'necessity', the evaluation of 'relating to' has contained the elements of assessing the contribution of the measure to the regulatory goal, and also its trade-restrictiveness. The term has not been explicitly subjected to the first part of the balancing test: evaluating the importance of the interest or value at stake. The same questions may arise regarding the effectiveness with which the sustainability criteria will achieve the EU's regulatory goals. Yet it is less rigorous to establish that the sustainability criteria have a direct connection or substantial relationship with these goals than the analysis required under the 'necessity' test.

One issue that has arisen in the context of Article XX(g) is whether Article XX contains a jurisdictional limitation to prohibit unilateral trade measures. The most specific jurisprudence resulted from *US – Shrimp*. The AB wondered whether it was necessary for a natural resource being protected, in this case sea turtles, to exist within the territory of the United States, the country defending its measure. They acknowledged that a degree of unilateralism is a common aspect of regulations that fall under the subparagraphs of Article XX.[113] However, they also verified that there was, indeed, a territorial 'nexus' in this dispute, as sea turtles passed through the waters of the US. They did not specifically address the question of how to proceed when there is no obvious territorial nexus.[114]

Sustainability criteria have a purer form of extraterritorial impact, based on no geographic link. The argument that EU criteria are not flexible enough to apply to all national contexts takes for granted that the regulatory goals behind them are legitimate. This critique may also be extended: these goals are specific to the EU, rather than universal. For example, perhaps a biofuels exporter has conservation areas that they feel can be sacrificed to meet their economic goals. When applied to imports as well as domestic products, the concept of sustainability seems particularly likely to give rise to this type of controversy.

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[111] *US – Shrimp*, above n. 37, at para. 136.
[112] E Reid, 'Regulatory Autonomy in the EU and the WTO: Defining and Defending Its Limits' (2010) 44(4) *Journal of World Trade* 894, 877 – 901.
[113] *US – Shrimp*, above n. 37, at para. 121.
[114] Ibid at para. 133.

On the other hand, many of the EU's trade partners have signed international agreements that suggest their commitment to preventing climate change and protecting the ecosystems identified in the EU's criteria. It could be argued that there is a shared basis for these regulations, even though they demand more than simply adherence to relevant international treaties.

Vranes offers a clarification of the difference between extraterritoriality and extraterritorial effects. In the former, a country directly regulates conduct occurring abroad, eg, requiring that state enterprises located abroad do not enter into contracts with polluting agencies, or applying domestic law directly in a foreign country. In the latter, a country imposes conditions for entry into the regulating state, but does not directly govern the means by which these are applied.[115] By this definition, it is clear that biofuels sustainability criteria are not extra-territorial as such, but simply have extra-territorial impacts. The third country is not forced to comply with the EU's criteria; they may simply choose not to export to EU markets. As there is a gray area in WTO law regarding this issue, the AB would have some discretion.

c) Article XX chapeau

The chapeau focuses on the application of the measure rather than its content. It provides an additional safeguard to ensure that it is not 'arbitrary discrimination', 'unjustifiable discrimination' or a 'disguised restriction on trade'. If it does not meet any of these conditions it will not comply with Article XX as a whole.[116] The influence of the chapeau was analysed in earlier Section 2(c). An additional consideration is that, in *Brazil – Tyres,* the AB focused its examination of compliance with the chapeau on the whether the application of the measure constituted arbitrary discrimination. The AB quoted the Panel that 'what is arbitrary must be decided in the light of the stated objective of the measure'.[117] The EU criteria seem vulnerable to a charge of arbitrary discrimination regarding the application of the measure's greenhouse gas emissions savings threshold. With respect to the EU's goal of preventing emissions, biofuels whose production only saves 34 per cent are not

[115] Vranes, above n. 105, at 165 – 168.
[116] 'GATT/WTO Dispute Settlement Practice', above n. 102, at 22; *US – Gambling*, above n. 90, at para. 317; Interestingly, in the context of the equivalent 'necessity' test of the General Agreement on Trade in Services ('GATS') dispute *US – Gambling*, the AB offered a conflicting view on the importance of negotiation. They specifically stated that engaging in consultations was not a reasonably available less trade restrictive measure, as consultations are a process whose outcome is unpredictable and therefore cannot be compared with the measure at issue. However this analysis did not take place in the context of the chapeau.
[117] *Brazil – Tyres*, above n. 79, para. 244.

substantially different in their contribution from those whose production meets the 35 per cent target. While the RED sets out in general terms the justifications for its renewable energy targets, and specifically its targets for biofuels, it does not address in detail the basis for setting these precise values for emissions savings. As Swinback has suggested, rather than drawing a line that disqualifies all biofuels below a certain threshold, the criteria would appear less arbitrary if they adopted a graduated approach to financial support based upon the level of emissions savings.[118]

ii. TBT 2.2

Current jurisprudence suggests that the issues that arose under the TBT Agreement would likely be very similar. However, there are some differences, such as the fact that the TBT Agreement applies to any 'legitimate objective'. Under the TBT Agreement, the EU would be able to define their precise regulatory objectives as they wished. This demonstrates an advantage of the TBT Agreement over Article XX, particularly in the case of emissions reduction, a regulatory goal for which there is not a perfect match. Yet the difficulty of adapting the EU provisions to Article XX subparagraphs should not be overstated, as there would likely be little political will to exclude the EU's regulation on such grounds.

Though TBT 2.2 also has a 'necessity' test, as discussed earlier, its emphasis is slightly different: it focuses on risks of non-fulfilment.[119] These risks may be assessed by considering, among other things, the scientific basis of a regulation. This emphasis and its implications form a focus of the next chapter.

H. A note on TBT 2.4

This thesis does not focus extensively on the TBT Agreement Article 2.4 ('TBT 2.4'), in part because there are no clearly established international standards on biofuels sustainability criteria. Nonetheless the provision raises the important question of whether the fact that biofuels sustainability criteria respond to an emerging problem will make them less likely to comply with WTO law. This section reviews this issue briefly.

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[118] A Swinback, 'Sustainability Criteria, the EU's RED, and the WTO: Some Economic Reflections', Power Point Presentation from 'Facts and myths about the compatibility of the EU Biofuels sustainability criteria with WTO rules' workshop of the Brazilian Sugarcane Industry Association (UNICA) and the ICTSD, Brussels, Belgium, 30 November 2011.

[119] *US – Tuna II*, above n. 62, at para. 318.

TBT Article 2.4 stipulates that technical regulations should be based upon international standards where they exist or their completion is imminent, unless they are an 'ineffective or inappropriate means for the fulfilment of the legitimate objectives pursued' eg because of geographic or technical limitations.[120] Assessing the compliance of biofuels sustainability criteria with TBT Article 2.4 reveals two significant questions for which existing jurisprudence does not provide a definitive answer. The first is the applicability of existing international standards on biofuels. The TBT Agreement Annex 1.2 specifies the definition of a standard, which include that compliance is not mandatory. The explanatory note to Annex 1.2 also states that '[s]tandards prepared by the international standardization community are based on consensus.'

In *US – Tuna II* the AB expanded upon this definition. They stated that for the purposes of the TBT Agreement, a standard must be adopted by a recognized international body whose primary function is to set standards, and which is open to participation by all WTO Members.[121]A TBT Committee Decision clarified that membership should be non-discriminatory, and it must be open at all stages of the development of the standards. The AB in *US – Tuna II* also affirmed that, in order to be considered as 'recognized', a standardizing body should disseminate information about its activities as proscribed by the same TBT Committee Decision.[122]

Multiple sustainability certification schemes for biofuels have emerged rapidly and recently; market forces are so dynamic that it is difficult to establish which standards are predominant. One advantage of basing national regulation on international standards is that it reduces the heterogeneity of national regulation, thus facilitating market integration. However, in this case heterogeneity is also an endemic feature of relevant international standards.

Aside from the fact that this diversity undermines one of the purposes of such standards, there is also the question of which, if any, of these schemes would be considered relevant with respect to the TBT Agreement. For example, voluntary international standards, eg those of the Roundtable on Sustainable Biofuels, are based upon partnerships between different stakeholders rather than national governments. The standards of the Global Bioenergy Partnership were developed by groups of

[120] TBT Agreement, Article 2.4, above n. 15, at 124.
[121] *US – Tuna II*, above n. 62, at paras. 356 – 363; 381 - 385.
[122] Ibid at paras. 372 - 376.

countries that did not contain all WTO Member States.

These issues are particularly relevant in circumstances where regulation applies to emerging environmental problems and thus international standards are emerging or in flux. Uncertainty regarding which standards are applicable under the TBT framework is a significant issue with respect to the proliferation of standards in the alternative energy sector more broadly.[123]

Another, related question has to do with the importance of basing national regulation in international standards. The wording of the requirement makes clear that this is not essential, but encourages countries to do so. If regulation for issues such as biofuels sustainability criteria is disadvantaged by the lack of clear existing standards, this would function more broadly as a disciplining factor against regulating such emerging problems.

4. Conclusion

This chapter analysed two central themes of the relationship between WTO law and EU biofuels sustainability criteria. First, it considered the implicit WTO influence on the process of crafting the criteria. Second, it argued that the attributes of sustainability regulation raise particular challenges of WTO law. With respect to the first theme, to achieve the promise of mutual supportiveness between sustainable development and trade liberalization, one WTO objective should be not interfering with national policies that aim to achieve sustainability. Yet, even without a trade dispute, this chapter argued that the WTO likely played a role in narrowing and weakening EU sustainability criteria. In this sense, the WTO did not provide institutional support for sustainable development, but rather undermined this goal. A WTO chilling influence is particularly problematic due to its embrace of the concept in principle.

However, to counterbalance these conclusions, it is also necessary assume a broader, less technical perspective. In the WTO, sustainable development wields soft power. Its inclusion in the founding agreement's Preamble, as a general principle and source of conceptual guidance, exemplifies this role. Citing the Preamble is

[123] G Marceau, 'The WTO in the Emerging Energy Governance Debate,' in J Pauwelyn (ed.), *Global Challenges at the Intersection of Trade, Energy and the Environment*, Centre for Trade and Economic Integration (Geneva: Graduate Institute, 2010) 25, 37.

discretionary, and it is difficult to characterize its applications in general terms. Nonetheless, this soft power has broad applications. EU biofuels sustainability criteria do not just face inward, as a specialized WTO legal issue; they are of international interest. The criteria were developed in response to growing public concern about biofuels, and subsequent pressure on Member States' governments. For this reason, in the event of a dispute, regardless of the technical details of the compatibility of sustainability criteria with WTO law, public response will focus on general perceptions of broad issues.

If WTO dispute settlement bodies determined that sustainability criteria are incompatible with WTO law, this would undermine their commitment to sustainable development, from the perspective of EU popular opinion at least, as well as in other constituencies who hold it as an important value. It would reveal a disconnection between the embrace in principle and the support in practice of sustainable development. Thus, the force of public opinion may also 'chill' a Member's desire to challenge such regulations through the dispute settlement system, and shape the outcome of such a dispute, were it to occur. For this reason, it would be inaccurate to dismiss the influence of sustainable development solely because of the limitations documented herein.

But these limitations should not be dismissed, either. The likely influence of the WTO on weakening the criteria demonstrates that national sustainability policies that impact upon trade raise particular challenges of WTO law. The second part of this chapter examined these challenges. The problems with adjudicating sustainability, as a legal concept in its own right, come back to the question of regulatory discretion. What types of regulations may be considered necessary to support 'sustainability'? On what basis can a Member State be empowered to make this determination, if it intrudes heavily on the domestic production scenarios of foreign countries? Sustainability as a legal concept, in practice, shares some of the same weaknesses as sustainable development in principle.

These weaknesses include the criteria's breadth. It may be difficult to justify why this broad concept must apply to a particular product. For this reason, simply proclaiming that labour standards, for example, are essential to sustainable development would seem not to justify such standards, unless there was a more specific rationale. More generally, this suggests a limited weight for 'sustainable

development' as an end in itself; otherwise it would provide a huge territory of regulatory discretion. Yet requiring a more targeted justification for a sustainability policy infringes upon on national sovereignty to promote the concept of sustainability when and how it chooses. As it stands, it is perhaps too easy to accept the final criteria at face value, without being aware of any concessions they make to WTO law.

The EU criteria demonstrate these weaknesses in practice. As well as their breadth, the criteria play into a number of unresolved issues in WTO law, including the role of PPMs and extraterritorial measures. Underlying both of these issues is uncertainty about how to strike the balance between deference to Member States and pursuit of trade liberalization. This is also significant because these attributes seem likely to apply to 'sustainability' regulation in general.

Because of its indeterminate soft power, the role of sustainable development in a WTO dispute on sustainability regulations is somewhat unpredictable. The scant WTO case law on sustainable development has associated it with species conservation. Thus, it remains unknown whether sustainable development might provide a similar justification for social welfare policies, such as labour standards or criteria to prevent food scarcity from biofuels production.

There is no reason to conclude that the concept would carry no weight at all in a dispute. The GATT/WTO approach to trade and environment has undergone significant migration, demonstrating a high level of discretion on the part of the dispute settlement bodies and adaptation to shifting norms. The term sustainable development itself is also subject to a large degree of discretion: its flexible role means that it can be either dismissed completely or cited as a central principle. These flexibilities suggest uncertainty about how the AB would interpret the WTO-legality of EU sustainability regulations. Overall, a dispute on EU biofuels sustainability criteria would shed light on an aspect of WTO law that would benefit from greater clarity, by forcing a confrontation with some of the more controversial aspects of sustainable development that WTO dispute settlement has largely avoided thus far.

Chapter 4

Indirect land use change and EU biofuels sustainability criteria

1. Introduction

The previous chapter documented a regulatory dynamic that shaped the formation of EU biofuels sustainability criteria: desiring to avoid trade conflict, the EC ('European Commission') recommended modifications that also weakened the criteria. This process gives rise to reflection on the complexity of sustainable development as a regulatory concept and the WTO challenges it raises. This chapter extends the analysis of some of the same regulatory dynamics into a new area: the ongoing process of formulating criteria for Indirect Land Use Change ('ILUC'). ILUC refers to the displacement of agricultural crops as a result of the biofuels use targets laid down by the EU Renewable Energy Directive ('RED')[1]. The same problem also results from the EU Fuel Quality Directive ('FQD'); required emissions savings for fuel will be achieved in part through use of biofuels.[2]

The RED and the FQD have caused a vast quantity of additional land to come into cultivation.[3] An overall expansion in agricultural production results in conversion of other agricultural cultivation to biofuels. This means that non-biofuels crops, or biofuels not intended for the EU, are being grown in different areas, including land that has never before been cultivated for agriculture, resulting in greenhouse gas emissions from deforestation. Further, additional cropland coming into cultivation

[1] European Council Directive 2009/28/EC of the European Parliament and of the Council on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC [2009] OJ L140/16 ('RED').

[2] European Council Directive 2009/30/EC of the European Parliament and of the Council amending Directive 98/70/EC as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Council Directive 1999/32/EC as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC [2009] OJ L 140/88 ('FQD').

[3] As noted in the thesis Introduction, estimates of the necessary land area vary. Reuters averaged fifteen different figures to estimate that the additional land area needed to meet EU biofuels targets is approximately the size of Denmark: P Harrison, 'Special Report: Europe finds biofuels and politics don't mix', *Reuters*, 5 July 2010, http://uk.reuters.com/article/2010/07/05/uk-biofuels-europe-idUKTRE6641G020100705 (visited 20 June 2012).

may be grown in areas that do not conform to other aspects of the EU criteria, such as its biodiversity conservation guidelines.

Both within and outside of EU bodies it has been suggested that, due to ILUC, EU biofuels policies are a climate change problem presented as a climate change solution.[4] Addressing this problem may be necessary to preserve the EU's core objective of reducing greenhouse gas emissions. For this reason, the EU is currently considering several options to extend existing sustainability criteria so that they address ILUC. The options include introducing additional sustainability criteria for certain biofuels that focus on ILUC, attributing emissions to biofuels based on their ILUC impact, or raising the overall requirement for emissions savings for biofuels across the board.

Past WTO disputes suggest that these approaches may not conform with WTO law. The fact that the EU is responding to problem too new for scientific consensus or a multilateral regulatory framework may make it more difficult to justify binding regulation that evaluates feedstocks based upon ILUC emissions levels. Further, it is difficult to document ILUC as it cannot be observed directly, and results from a complex interaction of market-based, political and regulatory forces. As has already proven the case in California, which introduced ILUC regulation, the basis for this assessment will likely be controversial as affected countries contest the calculation methodology.[5] Thus the first two options may be seen to discriminate against countries that grow certain feedstock types.

Likely in part to avoid this very problem, the EC has also proposed a third more general approach of raising the requirements for greenhouse gas emissions savings for biofuels across the board. Yet there is no guarantee that it will have any impact on reducing levels of ILUC, which could continue to undermine any emissions savings gained. While it avoids singling out individual countries, this overly simplistic approach does not seem that effective in responding to the complex problem of ILUC.

These problems are significant. However, they do not necessarily indicate that the measure intends to discriminate between or among the EU's trade partners. The case study suggests the need to examine more closely the problems posed by complex environmental regulation based upon emerging problems for which there is not a

[4] *See* sections 2(b) – (c).
[5] *See* section 3(a).

great deal of scientific or international consensus. Assuming that WTO trade norms lead to regulatory chill, or result in a trade conflict that the EU loses, WTO rules will have acted as a force in undermining the RED's core objective of reducing omissions. The example prompts thought on how the WTO system may provide appropriate deference to such regulation.

This chapter is divided into three parts. The first provides an overview of the controversy surrounding ILUC and the EU's response. The second analyses the compatibility of the EU's proposed solutions with GATT Articles I, III and XX and the TBT Agreement Articles 2.1 and 2.2. This analysis is very preliminary, as the EC has not yet provided much detail about regulatory options. The third comments upon the implications with respect to the balance between the EU's environmental objectives and its WTO obligations.

2. ILUC: A compelling and complex issue

A. The EU's response to ILUC

Though the existing RED and FQD criteria do not respond to the problem of ILUC, they do recognize its importance. The RED contains the following language:

> *The Commission should develop a concrete methodology to minimise greenhouse gas emissions caused by indirect land-use changes. To this end, the Commission should analyse, on the basis of best available scientific evidence, in particular, the inclusion of a factor for indirect land-use changes in the calculation of greenhouse gas emissions and the need to incentivise sustainable biofuels which minimise the impacts of land-use change and improve biofuel sustainability with respect to indirect land use change.*[6]

The EC committed to reviewing the impact of ILUC and proposing a strategy for minimizing that impact by the end of 2010. In December 2010, the EC published a report that contained a literature review of an array of studies, including reports from the Institute for Prospective Technological Studies of the EC's Joint Research Centre ('JRC'), the International Food Policy Research Institute ('IFPRI') and the Institute for Environment and Sustainability of the EC's JRC.[7]

The EC's report emphasized the uncertainty of the science surrounding ILUC and the 'deficiencies and limitations' of the process of modeling these impacts. They

[6] RED, above n. 1, at Preamble para. 85.
[7] European Commission, 'Report from the Commission on Indirect Land Use Change Related to Biofuels and Bioliquids', Brussels COM(2010) 811 final.

noted that different models yielded different results, depending on their underlying assumptions.[8] One of the limitations was that they could not take into account all of the factors that accounted for land-use change. Further, they stated that the inadequacy of current models meant that it was not possible to calculate the conversion of forest on peat lands, one the main ecosystems of concern with respect to ILUC. They estimated that a model that took into account more factors would reduce the estimated land use change.[9] They concluded that 'indirect land-use change can have an impact on greenhouse gas emissions savings associated with biofuels, which could reduce their contribution to the policy goals, under certain circumstances in the absence of intervention'.[10]

The EC outlined four policy options for a response. These were: 1) take no action, but continue to monitor; 2) increase the minimum greenhouse gas emissions savings threshold across the board; 3) introduce additional sustainability requirements on certain types of biofuels; and 4) attribute a particular quantity of greenhouse gas emissions to biofuels based upon their ILUC impact.[11] The EC also undertook public consultations on the issue. These consultations demonstrated that most industry and farmers' associations, as well as foreign countries, supported taking no action, or responding through international efforts. Most NGOs and non-biofuels producing industrial stakeholders thought that the EU should include ILUC emissions in existing greenhouse gas emissions savings requirements.[12]

The EC committed to formulating a response by mid-2011, a deadline which they did not uphold. On 2 May 2012 the college of EU commissioners met and demonstrated widespread support for responding to the problem, and the Directorate Generals for Energy (DG Energy) and Climate Action (DG Clima) have proposed to formulate a proposal by the end of 2012.[13] This may not be a straightforward process. According to EurActiv, DG Clima has favoured including ILUC regulation in the RED and the FQD, while DG Energy has not supported this position.[14] Further, as the RED and FQD are not delegated acts, any amendments to their sustainability criteria

[8] Ibid at 8 – 9.
[9] Ibid at 10 – 11.
[10] Ibid at 14.
[11] Ibid.
[12] Ibid at 13.
[13] 'Briefing: Biofuels and ILUC', Transport and Environment, May 2012.
[14] 'EU Report Questions Conventional Biofuels' Sustainability', EurActiv.com, 11 April 2012, http://www.euractiv.com/climate-environment/eu-report-questions-conventional-news-512076 (visited 8 June 2012.

for biofuels will need to be approved by the Parliament and the Council, which will add to the timeline of response.

B. ILUC controversy in the EU

The EC's conclusions in their 2010 report were relatively circumspect, limiting the necessity of response to 'certain circumstances' and stating that ILUC might reduce the contribution of biofuels to the policy goals, rather than undermining these goals completely. The report suggested that measures should be taken based upon the precautionary principle, rather than concluding outright that ILUC was a serious problem.[15]

Despite these conclusions, controversy about ILUC is growing within EU bodies. The extent of the controversy has emerged from a combination of official reports and analyses and internal and leaked communications. The cumulative effect of these statements reveals a loss of confidence in biofuels targets due in large part to the undermining impact of ILUC. Concerns were surfacing before the EC's initial report in late 2010. In February 2010, for example, the *New York Times* reported that a civil servant in the agriculture department at the EC, wrote a memo to a colleague that 'an unguided use of ILUC would kill biofuels in the EU'.[16]

More recently, in January 2012, EurActive reported on leaked EU data suggesting that palm oil, rapeseed and soybean oil had higher greenhouse gas emissions than conventional fuel when ILUC was taken into account. Instead, they were on par with oil obtained from the notoriously dirty tar sands of Canada. These results were disclaimed by the EC as they had not yet been published.[17] While palm oil is tropical, rapeseed and soybean oil are primary crops for sourcing biofuels within the EU. The EurActive report concluded that 'introduction of any ILUC factor would probably rule out high-emitting conventional biodiesels, the majority of Europe's biofuels production.'[18]

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[15] European Commission, above n. 7, at 14.
[16] J Kanter, 'Questions about Biofuels' Environmental Costs Could Alter Europe's Policies', *New York Times,* 12 February 2010, http://query.nytimes.com/gst/fullpage.html?res=9901E3D81231F931A25751C0A9669D8B63, visited 20 June 2012.
[17] 'Biodiesels pollute more than crude oil, leaked data show', *EurActive.com*, 27 January 2012, http://www.euractiv.com/climate-environment/biodiesels-pollute-crude-oil-lea-news-510437 (visited 20 June 2012).
[18] 'EU Report Questions Conventional Biofuels' Sustainability', above n. 15.

Indeed, if ILUC were to be taken into account on a crop-by-crop basis, it is likely that many feedstocks, both domestic and imported, would no longer qualify for the sustainability criteria's requirement that biofuels represent a 35 per cent savings in greenhouse gas emissions as compared to fossil fuels. Corroborating this conclusion, a recent report commissioned by the EC, 'EU Transport GHG: Routes to 2050', concluded that 'it is not possible (and useful) to determine cost effectiveness figures for [conventional] biofuels" because their indirect effect - measured in cleared forests and grasslands ('ILUC') - make it a CO2-emitting technology.'[19]

There is also considerable pressure on the EU not to include ILUC factors in their sustainability requirements as these may disqualify biofuels producers from any subsidies linked to greenhouse gas emissions savings targets. Allegations have emerged that EU bodies have been pressured by industry representatives to approach ILUC with extreme caution, emphasizing the uncertainty of the science and perhaps even distorting the assumptions of the models so that the problem would appear less grave.

For example, after the release of the EC's 2010 report on ILUC, Reuters reported that experts critiqued one of its primary sources, a 2010 IFPRI study,[20] suggesting it was biased against discerning negative impacts. They stated that the report lessened the estimated contribution of traditional biofuels toward the EU's 10 per cent renewable energy target and overestimated other, less energy-intensive sources. For example, the report assumed that 20 per cent of new cars would be electric by 2020. The EC was accused of requesting that IFPRI researchers 'use a five-fold exaggeration of its own electric car forecasts'.[21] The article also claimed that the model was based on a much larger percentage of second-generation biofuels than will be commercially available.[22] While one of the lead authors, David Laborde, denied that the assumptions were biased, he did confirm that the EC had wrongly estimated the ratio of cleaner bioethanol to dirtier biodiesel at 55/45, which in fact would be closer to 80/20.[23] Reuters invoked transparency laws to access a number of

[19] A Schroten, et al., 'Cost effectiveness of policies and options for decarbonising transport' (2011), AEA Technology plc, European Commission Directorate-General Climate Action, www.eutransportghg2050.eu (visited 20 June 2012).
[20] P Al-Riffai, B Dimaranan and D Laborde, 'Global Trade and Environmental Impact Study of the EU Biofuels Mandate', Final Report, March 2010, International Food Policy Research Institute (IFPRI).
[21] Harrison, above n. 3.
[22] Ibid.
[23] Ibid.

emails between EC departments, and reported that EU agricultural officials had cut sections of the IFPRI report that showed how soybean biodiesel could be four times more damaging to the climate than standard diesel.[24]

The 2011 IFPRI report corrected some of these assumptions. This report estimated a higher total percentage of biofuels contributing the RED renewable energy target (8.8 per cent instead of 5.6). The ratio of biodiesel to bioethanol, 83/17, was based upon more accurate forecasts. The report also increased the estimate of peat land emissions. The result was a higher estimate of the impact of land use change.[25]

More broadly, there has been disillusionment with the EU's support for biofuels based upon the allegation that they reflect industry special interests rather than environmental goals. An April 2012 report from EurActive quoted an European Parliament official stating that the emphasis on biofuels in the renewable energy targets responded to pressure from the agricultural and car lobbies. These industries felt that biofuels targets would provide financial rewards to offset some of the other costs of the EU's clean energy requirements.[26]

The report also quoted Laborde as stating: 'The truth is that policy makers inside and outside Europe are doing biofuels for other reasons than environmental ones. It's a new and easy way to give subsidies to farmers, and it's also linked to industrial lobbies that produce these biodiesels…They want to diversify the energy supply, and keep their foreign currencies instead of buying oil from the Middle East. They prefer to keep it for something even if it is not efficient or even green.'[27] Including an ILUC factor in sustainability criteria may undermine the industry groups that lobbied for biofuels targets.

C. Studies and industry response

The 2011 IFPRI Report concluded that palm oil is the most important source of land use change emissions, due to conversion of peat lands.[28] As peat lands store gasses that contribute to climate change, their conversion results in high emissions. Under

[24] Ibid.
[25] D Laborde, 'Assessing the the Land Use Change Consequences of European Biofuel Policies', International Food Policy Institute ('IFPRI') October 2011, at 36, 107 – 108.
[26] 'EU Report Questions Conventional Biofuels' Sustainability', above n. 14.
[27] Ibid.
[28] Laborde, above n. 25, at 62-63.

existing sustainability criteria, EU imports of palm oil are not sourced from peat lands. The 2008 Report from the JRC Institute for Environment and Sustainability, one of the sources for the EC's 2010 report on ILUC, came to the startling conclusion that 'if roughly…2.4% of biodiesel comes directly *or indirectly* from palm oil grown on peat land, the GHG savings from EU biodiesel are cancelled out'.[29] [Emphasis added] A report by Wetlands International concluded that biofuels targets have led to an increase to the deforestation of peat lands to make room for new plantations in Southeast Asia. The report indicated that the ecosystem was increasingly imperiled, and biofuels-related ILUC is a major driver of this problem.[30]

Another source of concern is the impact of ILUC in biodiverse ecosystems of Brazil. One academic study found that ILUC emissions from forecasted growth in demand for sugarcane ethanol and soy biodiesel in Brazil would overcome emissions savings from biofuels use. This is because the additional cultivation would push cattle rangelands into new territory, primarily the Amazon rainforest and the cerrado ecosystem. The study examined areas of forecasted deforestation, reporting that:

> *Sugarcane ethanol and soybean biodiesel would be responsible for 41% and 59% of this indirect deforestation, respectively. These percentages were determined by fulfilling only the demand for sugarcane ethanol, while keeping soybean biodiesel production at current levels and vice-versa. Higher potential productivity of grass favors allocation of rangelands in Amazonia instead of in other native habitats.*[31]

Another study developed a statistical model proving that the increase in biofuels production was pushing other crops into agricultural 'frontier' areas, in particular the Amazon rainforest.[32]

But biofuels-related ILUC is an immature area of study. The results of the sugarcane ethanol studies, for example, are contested by the 2011 IFPRI report, which suggested that ethanol had a relatively low contribution to land-use change as

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[29] R Edwards, et al., 'Biofuels in the European Context: Facts and Uncertainties' (2008) European Commission Joint Research Centre, Institute for Environment and Sustainability.

[30] Wetlands International, 'New figures: palm oil destroys Malaysia's peatswamp forests faster than ever', Press Release, 1 February 2011, http://www.wetlands.org/NewsandEvents/NewsPressreleases/tabid/60/articleType/ArticleView/articleId/2583/Default.aspx (visited 20 June 2012).

[31] DM Lapola et al., 'Indirect land-use changes can overcome carbon savings from biofuel in Brazil' (2010) 107(8) PNAS, 3388 – 3393, http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2840431/ (accessed 8 June 2012).

[32] EY Arima et al., 'Statistical confirmation of indirect land use change in the Brazilian Amazon' (2011) 6(2) *Environmental Research Letters*, http://iopscience.iop.org/1748-9326/6/2/024010 (visited 8 June 2012).

compared to biodiesel.[33] As documented subsequently, the EU has taken the position that encouraging imports of Brazilian sugarcane ethanol will have a positive impact on the RED's emissions-related goals.

Perhaps not surprisingly, biofuels producers have emphasized the inconclusiveness of the science, and the gaps and discrepancies in the analyses that have been performed. One example can be found on SugarCane.org, a website developed by the Brazilian Sugarcane Industry Association and the Brazilian Trade and Investment Promotion Agency 'to serve as a global information hub on sugarcane products and their economic, environmental and social benefits around the world'.[34] The website contains an article addressing ILUC from biofuels production in Brazil. The article stated that there is no scientific consensus on the issue, citing the range of figures for ILUC-related carbon dioxide emissions calculated by the 2011 IFPRI study as well as US regulatory bodies. It identified several sources of uncertainty, such as the lack of available data, the use of inaccurate default values, the inability to link the models to other, related agricultural sectors, and the inability to accurately take into account shifting conditions of production due to both market and regulatory factors. Instead, they concluded that the best response is internationally-negotiated solutions for better land management and protection of imperiled ecosystems.[35]

Further, regarding the leaked EU figures that concluded certain types of biofuels were as dirty as oil from Canadian tar sands, a spokesperson from the European Biodiesel Board stated that the science was too contradictory to place any faith in these results. She also called into question the EU JRC and IFPRI reports, as they were not consistent with the results of studies performed in the US.[36] Industry representative Gerard Tubery, Chairman of the lobby group Copa-Cogeca's Working Party on Oilseeds and Protein Crops, also denounced the findings of this report on the basis that their models for calculating emissions from land use change were not based upon international standards.[37]

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[33] Laborde, above n. 25, at 87, 14.
[34] SugarCane.org, Spreading the Word about Clean Solutions from Sugarcane, 'About this Site', http://sugarcane.org/unicaglobal/about-this-site (visited 20 June 2012).
[35] SugarCane.org, 'Measuring changes in land-use': http://sugarcane.org/sustainability/preserving-biodiversity-and-precious-resources/measuring-changes-in-land-use (visited 8 June 2012).
[36] 'Biodiesels pollute more than crude oil, leaked data show', above n. 18.
[37] 'Indirect Cost of Conventional Biofuels Highlighted in New Study', International Centre for Trade and Sustainable Development (ICTSD), 16(2) Bridges, 16 April 2012, http://ictsd.org/i/news/biores/131117/ (visited 20 June 2012).

D. The complexities of regulating ILUC

In another candid statement to EurActive, the chief author of the 2011 IFPRI report, Laborde, well summarized the problem facing the EU. He said that the EU's biggest error was 'that we started to make a policy without knowing the effect it would have….We are now discussing the land use effect after saying for ten years that we need biofuels to reduce emissions. It was a serious mistake.'[38] In setting renewable energy targets, the EU created the obligation to respond to this perverse impact on greenhouse gas emissions. Yet, due to the controversial nature of the problem, as well as its sheer complexity and the lack of established scientific analyses, devising an appropriate regulatory response to ILUC is a steep challenge.

As documented earlier in this thesis, current EU biofuels sustainability criteria have already resulted in informal complaints from domestic and foreign producers. Yet existing criteria are much less ambitious in their scope. They apply only to the crops that supply the EU with its biofuels, and are implemented on a producer-by-producer basis. Responding to ILUC will require taking into account impacts that occur beyond the spatial boundaries of biofuels production for the EU, and that concern agricultural products that may not even be consumed in the EU. ILUC is a macro-level problem, for which micro-level biofuels producers cannot be held responsible. Instead, ILUC results from agricultural market dynamics combined with large-scale regulatory failures to protect threatened ecosystems on the part of the producing countries.

Another key driver is the growing global demand for agricultural production for both food and fuel, and its resultant impact on all ecosystems that yield cropland. Some NGOs, such as Transport and Environment, have lobbied the EU to drop its targets, or ensure that no 'first generation' biofuels could count toward sustainability targets.[39] Indeed, discarding these incentives would provide a more straightforward solution than imposing sustainability criteria. However, the EU has maintained its commitment to the RED and FQD targets.

The following section focuses on another challenge to crafting an appropriate response to ILUC: international trade law. Just as the scientific uncertainty and complexity of the problem has become a principal argument of industry that the EU

[38] 'EU report questions conventional biofuels' sustainability', above n 14.
[39] 'Biofuels: Dealing with Indirect Land Use Change', *Transport and Environment* briefing.

should not introduce regulations, these same factors may mean that regulations do not conform to WTO law.

3. The EC's proposed regulatory options and their relationship with WTO law

The fact that both IFPRI reports on ILUC were commissioned by the EC's DG Trade demonstrates that the EC has trade concerns in mind when considering its response to ILUC. The following analysis will focus upon the different options that the EC proposed in its 2010 report (apart from doing nothing but continuing to monitor the problem). It should be noted that, barring more specific information on the regulatory options, this is a broad-brush analysis. However it highlights issues with larger significance to the relationship between WTO law and national environmental regulation; these issues are addressed in the subsequent analysis.

It is interesting to note that the EC does not include an incentive-based system for responding to ILUC. For example, their proposal does not include tying better-performing biofuels to additional subsidies. The RED stated that the EC would examine options to incentivize biofuels that had low ILUC impacts.[40] Yet these regulatory options all impose stricter regulatory requirements. A consortium of stakeholders including Shell and the International Union for the Conservation of Nature commissioned Ernst and Young to examine pragmatic elements of the EU's proposed options. The report concluded that incentive-based ILUC regulation would be more effective. They recommended to the EU that it extend its current reward mechanisms for particularly ecologically-friendly biofuels such as second-generation biofuels and those grown on highly degraded lands to include low-ILUC biofuels.[41] Therefore it is somewhat surprising that the EC does not appear to be proposing options along these lines.

A. Introducing additional sustainability criteria for certain biofuels or attributing ILUC emissions by feedstock

The EC outlined two options based upon regulating specific types of biofuels. The first is to apply additional sustainability criteria to some biofuels, focusing these on

[40] RED, above n. 1, at para. 85.
[41] 'Biofuels and indirect land use change: the case for mitigation', 'Biofuels and indirect land use change: the case for mitigation', Ernst and Young, October 2011, at 26.

ILUC impacts. The second is to attribute emissions values to particular biofuels feedstocks based upon their contribution to ILUC. These two options raise similar trade concerns; thus they will be considered together.

The EC did not outline these regulatory options in depth, but simply listed them; there are unanswered questions about how they would be applied. The first option leaves open questions about the precise nature of the additional criteria and the selection criteria for its applicability. Perhaps producers who grew certain types of biofuels in countries with certain ecosystems, such as peat lands, would be subject to additional scrutiny about the impacts of their production on ILUC. Possibly some biofuels would be subject to additional requirements for direct emissions savings. This might include, for example, minimum yields, the efficiency of conversion from feedstock to biofuels or using biofuels waste products to generate energy or for other purposes.

The second option, to attribute certain emissions values to biofuels by feedstock based upon their contribution to ILUC, seems more likely; there is some indication that the EC are thinking of introducing at least minimal categories to distinguish types of biofuels based upon their emissions level. The International Centre for Trade and Sustainable Development reported in its trade digest in April 2012, 'Brussels is due to publish a proposal measuring the indirect emissions caused by biofuels later this year, distinguishing between low-emitting biofuels such as ethanol and high-emitting ones like biodiesel.'[42]

The strength of these approaches is that they target particular biofuels which contribute the most to ILUC. However, they pose the risk that they will impose regulatory requirements so stringent that producers of biofuels with negative ILUC impacts will simply export to different markets that do not have such requirements.

Another concern with both of these options is that they would have a perverse impact with respect to the FQD, which stipulates that there must be a 6 per cent reduction in greenhouse gas emissions, achieved in part through blending lower-emission biofuels with fuel. If the standard for emissions savings is stricter, this may mean that overall more biofuels must be produced to fulfil the required threshold. This could result in greater levels of ILUC.[43]

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[42] 'Indirect Cost of Conventional Biofuels Highlighted in New Study', above n. 37.
[43] 'Biofuels and indirect land use change: the case for mitigation', above n. 41, at 21.

The second option, attributing ILUC emissions by feedstock, has already been adopted as part of California's Low Carbon Fuels Standard ('LCFS'), which provides a useful comparative study. The establishment of ILUC emissions values has proven controversial, and the uncertainties in the science have also made the effort susceptible to industry pressure. For example, the ILUC factor for corn ethanol was halved between 2010 and 2011.[44]

The California Air Resources Board that formulated the criteria also raised some additional concerns about modelling ILUC. These included the fact that ILUC is a dynamic issue and will need to be re-evaluated frequently. This creates regulatory uncertainty, with a negative impact on biofuels producers and markets.[45] Similar problems would likely arise for the EU.

Also, there will be different methodologies for calculating ILUC indirect emissions and direct emissions. The latter are already included in the relevant Directives and the EU has produced a calculation methodology. There could be inconsistencies within the EU's framework for climate change mitigation, such as its Emissions Trading Scheme.[46] In sum, though they have the advantage of providing a relatively direct response to the regulatory problem of ILUC-related emissions, these approaches have some potential shortcomings.

B. Trade considerations

i. Most Favoured Nation Principle

The options outlined raise questions with respect to the Most Favoured Nation ('MFN') Principle as articulated in GATT Article I(1) ('Article I(1)'). The core of the MFN Principle is that Member States should not grant import advantages selectively to certain trade partners. More formally, Article I(1) stipulates that countries cannot discriminate between WTO Members with respect to customs duties and charges, rules of import and export, and taxes and regulations. Whatever advantage, privilege

[44] 'RFA: CARB to cut LCFS penalty for ethanol in half', *Biofuels Journal*, 19 November 2010, www.biofuelsjournal.com/articles/RFA__CARB_to_Cut_LCFS_Penalty_for_Ethanol_in_Half-101602.html (visited 20 June 2012).
[45] Final Report of the CARB Expert Subgroup on 'Comparative and Alternative Modelling Approaches' (2010), http://www.arb.ca.gov/fuels/lcfs/workgroups/ewg/010511-final-rpt-indirect-effects.pdf (visited 20 June 2012).
[46] 'Biofuels and indirect land use change: the case for mitigation', above n. 41, at 22.

favour or immunity is extended to one must be extended to all.[47] Article I(1) compares treatment between a category of imported products (in this case biofuels) and 'like' products imported from any third country that is a WTO Member State.

Singling out certain feedstocks (or ecosystems) for additional regulatory requirements will disproportionately impact certain trade partners. A country that grows particular crops may argue that they have little choice which type of biofuels to produce due to natural or industry-related constraints. The regulation may be seen as identifying these countries for discriminatory treatment.

Allocating ILUC greenhouse gas emissions by feedstock implies changes to the existing default values that the EU established as part of the RED.[48] These default values calculate the amount of emissions savings of each feedstock when compared to fossil fuels; the higher the value, the cleaner the biofuel. The current required savings is 35 per cent; this jumps to 50 per cent in 2017.

Some of the default values vary vastly based upon the way in which biofuels from a particular feedstock are produced. For example, palm oil with production method unspecified offers only a 19 per cent savings over fossil fuel. This is one of the lowest default values. Palm oil produced with methane capture offers 56 per cent savings, which meets the 2017 target. Similarly, wheat ethanol varies between 16 per cent and 69 per cent depending on production method. These differences provide incentives for producers to adopt cleaner production technology in order to gain better access to the EU market. Yet producers of biofuels with high ILUC values would take on an emissions burden that was not directly connected to the way they produced their biofuels. They would have to work very hard to reduce the direct emissions from their crops to the extent that they would qualify for the EU market. The addition of another variable for ILUC-related emissions would create winners and losers, and it is possible that some of these losers may feel that the additional regulation is particularly unfair.

Palm oil would be one of these losers. If the ILUC-based reduction reached more than 6 per cent this would mean that even palm oil produced following the EU's proscribed best practice of capturing methane would no longer qualify. While current

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[47] *See* General Agreement on Tariffs and Trade, Article I(1), 14 April 1994, GATT Secretariat, *The Results of the Uruguay Round of Multilateral Trade Negotiations, the Legal Texts* (Cambridge: Cambridge University Press, 1994) 424.
[48] RED, above n. 1, at Annex V.

emissions savings for palm oil can be altered based upon behaviour, the ILUC figure is beyond the reach of producers, and instead based upon fundamental ecosystem characteristics of the producing country. Thus, it introduces a type of discrimination between biofuels tied to the characteristics of certain producing countries and not others.

ii. The National Treatment Principle

The National Treatment Principle ('NTP') stipulates that a Member State must treat imported products equally to its own domestic products, with respect to taxes and regulations. It is certainly possible that a country would bring forth a complaint under the NTP of either GATT Article III(4) ('Article III(4)') or the TBT Agreement's Article 2.1 ('TBT 2.1).[49] The TBT Agreement only applies to certain types of measures that can be described as 'technical'. The definition of technical contains several components: the regulations must refer to an identifiable product or group of products, must lay down product characteristics, and must be mandatory.[50] Based upon recent TBT jurisprudence from *US – Tuna II*, this chapter assumes that the TBT Agreement would apply to ILUC criteria.[51]

In some respects, making a claim under the NTP of either GATT Article III(4) or TBT 2.1 seems more difficult than under the MNF. This is because introducing extra sustainability criteria to certain biofuels, or adding ILUC emissions values based upon feedstock, would also have a negative impact on domestic biodiesel producers. Increasing the ratio of (largely imported) cleaner ethanol to (largely domestic) dirtier biodiesel has been a common recommendation for redressing negative environmental impacts of biofuels production.[52]

This negative impact on domestic biodiesel has important implications. There will likely be strong resistance to these options from the EU biodiesel producers who would face additional requirements. Also, incorporating ILUC factors tied to specific

[49] *See* Chapters 3 and 5 for the full provisions.
[50] WTO Appellate Body Report on European Communities – Measures Affecting Asbestos and Asbestos-Containing Products *(EC-Asbestos)*, WT/DS135/AB/R, adopted 12 March 2001, paras. 66-70.
[51] This conclusion about the applicability of the TBT Agreement to the EU criteria is explicated in full in Chapter 3, Section 3(C). *See* WTO Appellate Body Report on United States – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products *(US – Tuna II)*, WT/DS381/AB/R, adopted 16 May 2012.
[52] *See, eg,* Al-Riffai, et al, above n. 20; 'Biofuels and global trade study goes online', European Commission, Press Release, 25 March 2010, http://trade.ec.europa.eu/doclib/press/index.cfm?id=542 (visited 20 June 2012); Laborde, above n. 25, at 14; RED, above n. 1, at Art. 16.

biofuels would be beneficial for foreign ethanol producers. For these reasons, it is not logical that the EC would propose this approach with a protectionist aim in mind.

However, not all foreign producers would be winners. For this reason, the MFN arguments above apply in the context of the NTP. For example, under the first option, if the EU identified certain ecosystems for extra criteria, or mandated certain emissions-lowering production procedures for some biofuels, this could be seen as a means for singling out imported biofuels for less favourable treatment. Along the same lines, under the second option, if they adopted ILUC emissions values for particular feedstocks, it could be argued that these were designed to unfairly disadvantage foreign producers. As no ILUC emissions values have yet been produced, it is not possible to examine their methodology in depth, but it is likely that its scientific basis will be highly contestable. If it appears that this methodology unfairly singles out foreign producers, this could certainly be the basis for an NTP claim.

iii. GATT Article XX ('Article XX')

If ILUC criteria violated Article I(1) or Article III, the dispute settlement bodies would then consider whether the measure qualified as an exception to the GATT under Article XX. These exceptions are listed in Article XX's subparagraphs. Article XX also has a chapeau that serves as an additional safeguard to ensure that the measure is not protectionist in intent.[53]

The RED committed the EC to developing methodologies to '*minimise greenhouse gas emissions* caused by indirect land-use changes.' [Emphasis added] It also states that the EU should 'incentivise sustainable biofuels which *minimise the impacts* of land-use change and *improve biofuel sustainability* with respect to indirect land use change'.[54] [Emphasis added] This suggests that the EU's regulatory objectives are to reduce ILUC-related emissions as well as negative sustainability impacts of ILUC more generally.[55] This interpretation is supported by the EC's 2010 Report on ILUC.[56]

[53] Relevant portions of Article XX are written in full in Chapter 3, Section 2(B).
[54] RED, above n. 1, at Preamble, para. 85.
[55] The EU stated that the broader regulatory goals outlined in the second statement should be incentivized. However, as noted, the EC has not proposed incentive-based measures.
[56] Al-Riffai, et al., above n. 20, 3-4.

The most relevant Article XX subparagraphs are Article XX(b), which deals with measures 'necessary to protect human, animal or plant life or health', and Article XX(g), which deals with measures 'relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption'.[57] These are the same subparagraphs that would be most relevant in an Article XX dispute on the existing criteria. Jurisprudence on Article XX has stipulated that the AB first evaluates the measure's compliance with the subparagraph and then the chapeau.[58]

a. Article XX(b)

Under Article XX(b), the EU might argue that their regulatory objective of reducing ILUC emissions is necessary to prevent the negative human, animal and plant health consequences of climate change. There is no precedent for this argumentation, which would have larger significance. They also might argue that the same types of ILUC that create the highest emissions also imperil animal and plant life or health, through deforestation and biodiversity loss. Regulation addressing solely emissions levels does not take these impacts into account. The EU might establish a correlation between high emissions from ILUC and other negative sustainability impacts such as deforestation and biodiversity loss, but this is a very speculative assessment.

Under XX(b), the AB would apply the necessity test, as explicated in Chapter 3. This entails determining the importance of the value at stake, the contribution of the measure to the regulation's goals, and whether it was the least trade-restrictive means reasonably available to achieve this goal.

In general, there is not an excessive amount of judicial scrutiny when establishing the importance of the regulatory goal at stake. Such scrutiny would be politically sensitive given the WTO's stated commitment to respecting Member's rights to pursue the regulatory goals of their choosing. As the AB stated in *US – Gasoline*,

> *WTO Members have a large measure of autonomy to determine their own policies on the environment (including its relationship with trade), their environmental objectives and the environmental legislation they enact and implement. So far as concerns the WTO, that autonomy is circumscribed only*

[57] Marrakesh Agreement Establishing the World Trade Organization, Article XX, above n. 48, at 455.
[58] 'GATT/WTO Dispute Settlement Practice Relating to GATT Article XX, paragraphs (b), (d), and (g)', World Trade Organization, Committee on Trade and Environment, WTO/CTE/W/203, 8 March 2002, 6 – 10.

by the need to respect the requirements of the General Agreement and the other covered agreements.[59]

For this reason, particularly due to international recognition of climate change as an urgent environmental problem, the AB would probably confirm the importance of the value at stake.

With respect to the option of appending extra sustainability criteria to some biofuels, it would be difficult to make an assessment of the second two components of the necessity test without a better idea of the specific criteria that the EU had in mind. It is easier to analyse the more likely option that the EU would assign ILUC emissions values to particular biofuels.

The contribution of this solution to the regulatory objective pursued is fundamental, in the sense that the overall aim of the EU RED and FQD is to mitigate climate change. If they actually increased climate change, this would be a serious concern. This approach directly targets biofuels that contribute the most to ILUC, and attempt to mitigate this negative impact.

Yet this conclusion can also be critiqued on several grounds. First, the introduction of additional emissions does not address the EU's regulatory objectives, as producers of biofuels with high ILUC emissions would simply export these to other markets. Second, regulating ILUC solely with respect to biofuels and not other agricultural products is inconsistent and ineffective, as biofuels constitute only a small percentage of agricultural production. Adding regulations will increase the burden on producers without making a significant contribution to the regulatory goal of preventing climate change.

Third, it is an extremely indirect approach, as it does not have anything to do with the biofuels that are actually being imported into the EU. It is debatable whether these biofuels can be seen as responsible for ILUC, when their producers may have no ability to influence the ILUC for which their biofuels are purportedly responsible. Also, the specific emissions savings levels the EU establishes will be vulnerable to challenge on methodological grounds.

Finally, the AB may determine that a less trade restrictive means of regulating ILUC is reasonably available. The critique that this approach is ineffective and indirect may lead to the conclusion that the EU should pursue a broader and more

[59] WTO Appellate Body Report on United States – Standards for Reformulated and Conventional Gasoline, WT/DS2/R *(US – Gasoline)*, adopted 29 April 1996, 29.

integrated approach to responding to ILUC that takes into account its other relevant regulations. This less trade restrictive approach might also involve pursuing international solutions to preventing climate change and deforestation/biodiversity loss that results from the conversion of frontier areas into agricultural production. All of these reasons suggest that it would be unlikely that this regulatory option could be justified under Article XX(b).

b. Article XX(g)

Under Article XX(g), the EU might argue that introducing ILUC factors relates to the conservation of exhaustible natural resources, as the failure to do so would lead to deforestation of imperiled ecosystems and associated biodiversity loss. This focus on species conservation would parallel *US – Shrimp*.[60] They might also attempt to adopt this provision to climate change. In *US – Gasoline*, the Panel agreed that clean air was an exhaustible natural resource.[61] The EU could reverse the argument: current levels of atmospheric carbon dioxide are an exhaustible natural resource that ILUC criteria help to protect.

Under Article XX(g), rather than being 'necessary' to fulfil the conditions of the subparagraph, the measure must 'relate to' the fulfilment of these conditions. The *US – Shrimp* dispute has demonstrated that this degree of connection must be substantial; the means and ends must be reasonably related, observably close and real.[62] There is no requirement to determine the importance of the value at stake, or the existence of less trade restrictive means. It does not seem that the slightly weaker relationship required would have a significant impact in changing the judicial considerations outlined above. The requirement raises a similar set of problems as the Article XX(b) necessity test regarding the effectiveness of the measure in fulfiling the regulatory purpose. These problems have to do with the methodological difficulties involved with calculating ILUC values, as well as the indirectness and ineffectiveness of the approach with respect to the regulatory goal.

The subparagraph also stipulates that the measure must be taken in conjunction with restrictions on domestic production or consumption. Any additional criteria or emissions values that the EU assigned would also be assigned to feedstocks

[60] WTO Appellate Body Report, United States – Import Prohibition of Certain Shrimp and Shrimp Products *(US – Shrimp)*, WT/DS58/AB/R, adopted 15 June 2001, para. 128.
[61] WTO Panel Report on United States – Standards for Reformulated and Conventional Gasoline, WT/DS2/R *(US – Gasoline)*, adopted 29 January 1996, para. 6.37.
[62] *US – Shrimp*, above n. 60, at para. 141.

grown in the EU. Whether these additional requirements would be applied in a perfectly even-handed manner is an open question. It is possible that foreign biofuels will be more negatively impacted overall, and almost inevitable that certain countries will be more negatively impacted than others.

c. Article XX chapeau

As a final step, the AB would consider whether the measure complied with the Article XX chapeau. The chapeau focuses on the application of the measure rather than its content. It provides an additional safeguard to ensure that it is not 'arbitrary discrimination', 'unjustifiable discrimination' or a 'disguised restriction on trade'. If it does not meet any of these conditions it will not comply with Article XX as a whole.[63] When determining whether the application of the measure constitutes arbitrary or unjustifiable discrimination, the AB in *US – Shrimp* established some considerations, including an effort to negotiate toward concluding a bilateral or multilateral agreement, and the flexibility of the measure.[64]

An ILUC emissions value will be calculated by the EU, rather than through a negotiation process. Further, there are no international standards for ILUC values against which these values can be measured. It is possible that the EU would enable trade partners to provide their own ILUC calculation methodology, as they do with greenhouse gas emissions in the existing Directives. This would provide some flexibility; however, these values would likely still be subject to conformity assessment, as they are under the current criteria. A more flexible approach would enable trade partners to address ILUC through a different regulatory approach entirely.

Chapter 3 documented how calculating default values of RED emissions savings for biofuels feedstocks might lead to WTO challenges. With respect to ILUC, these types of problems are even more difficult. The EC's 2010 Report recognized that:

> *Estimating the greenhouse gas impact due to indirect land-use change requires projecting impacts into the future, which is inherently uncertain, since future developments will not necessarily follow trends of the past. Moreover, the estimated land-use change can never be validated, as indirect land-use change is a phenomenon that is impossible to directly observe or measure.*[65]

[63] 'GATT/WTO Dispute Settlement Practice', above n. 58, at 22.
[64] *US – Shrimp*, above n. 60, at para. 161-164, 166.
[65] European Commission, above n. 7, at 6.

In other words, ILUC emissions calculations are speculative. They are based upon an *ex ante* evaluation; actual emissions may differ from predicted emissions. This may lead to the perception that the regulation is unreliable and therefore arbitrary. It is also unilateral in its application.

In *EC – Asbestos*, the Panel clarified that a disguised restriction on trade meant that the intent of the measure was in fact protectionism; this could be discerned by examining the measure's 'design, architecture and revealing structure'.[66] The methodological uncertainties with calculating ILUC emissions levels make them vulnerable to the claim that they were calculated in order to disadvantage certain imported biofuels.

iv. TBT Agreement

a. TBT Article 2.2 ('TBT 2.2')

Under TBT Agreement, as with Article XX, there is little likelihood that the AB would deem a regulatory objective illegitimate, as this would not support their general position of deference. As the Preamble to the TBT Agreement states:

> *No country should be prevented from taking measures necessary…for the protection of human, animal or plant life or health, of the environment, or for the prevention of deceptive practices, at the levels it considers appropriate.*[67]

However, they do undertake a formal evaluation of the legitimacy of this objective. As reviewed in the previous chapter, recent jurisprudence suggests that the TBT 2.2 necessity test also involves 'weighing and balancing', though of slightly different elements: the trade restrictiveness of the technical regulation, the contribution of the measure and the risks of non-fulfilment. In this 'necessity' test, the arguments raised in the analysis of Article XX(b) are also applicable. On one hand, regulating ILUC is fundamental to achieving the primary regulatory goal of the RED. The EU might also employ a consumer deception defence similar to the US in *US – Tuna II*. In this dispute, in the context of TBT 2.2, the dispute settlement bodies identified consumer information as one of two core objectives of the measure. Specifically, they did not want consumers to be misled about whether dolphins were harmed by tuna products.[68] Similarly, the EU might argue that consumers are in fact

[66] WTO Panel Report on European Communities – Measures Affecting Asbestos and Asbestos-Containing Products *(EC – Asbestos)*, WT/DS135/AB/R, adopted 18 September 2000, para. 8.236.
[67] TBT Agreement, Preamble, above n. 47, at 122.
[68] *US – Tuna II*, above n. 50, at para. 324.

subsidizing biofuels. The overall objective of the EU criteria is to mitigate climate change. Therefore, consumers have the right to know that subsidies are not creating perverse incentives. These arguments support the conclusion that the measure contributes to the achievement of the legitimate objective of mitigating climate change.

When assessing the trade-restrictiveness of the measure and its contribution to the regulatory goal, methodological shortcomings may again prove problematic. TBT 2.2 clarifies that assessing the risks of non-fulfilment can be based upon 'inter alia: available scientific and technical information, related processing technology or intended end-uses of products'.[69] While the risks are serious; namely, undermining the core purpose of the RED and FQD to reduce emissions, scientific assessments of this risk are not well established.

C. Increase minimum greenhouse gas savings threshold for all biofuels

The final regulatory option that the EC proposed deals with indirect emissions prevention by increasing the requirements for direct emissions prevention for all biofuels. The downside of this approach is that it is not directed at the problem it aims to address. There is no guarantee that a crop that provides low direct greenhouse gas emissions is not also responsible for a high level of ILUC-related emissions. Palm oil is a good example: while palm oil with methane capture provides greenhouse gas emissions savings of 56 per cent, there are still concerns that the production of compliant palm oil is leading to deforestation of peat lands elsewhere. While this regulatory approach might result in lower ILUC overall, this would be coincidental; it might even encourage intensification of crops that lead to higher levels of ILUC if they had low direct emissions values.

As it will not single out particular crops for more stringent criteria, this option will probably be more popular with producers and thus politically more feasible. Another major advantage is that it will not be bogged down in all of the methodological difficulties of calculating ILUC, and associated controversy.

The 2011 IFPRI report recommended this course of action. They rejected the option of identifying particular feedstocks, as the introduction of additional criteria for certain biofuels would have 'leakage' impacts due to the interconnectedness of

[69] TBT Agreement, Article 2.2, above n. 47, at 124.

agricultural markets. For example, if a large additional emissions value is placed upon palm oil due to ILUC, this could simply increase the demand for biodiesel sourced from soybean oil, or producers may direct more of their product toward food rather than fuel markets. This may increase the demand for one or two feedstocks for biofuels, which could destabilize the market.[70]

However, the approach suffers from a lack of clarity of intent. If it intends to combat ILUC-related emissions, its effectiveness seems dubious. If it intends simply to lower the greenhouse gas emissions from biofuels production, this raises a different set of questions: what is the justification for introducing additional requirements to the RED and the FQD now? On what basis is this calculation performed? These issues also make the regulatory approach difficult to justify from a WTO perspective.

D. Trade considerations

i. MFN/NTP

Unlike the previously considered options, this approach would not single out particular biofuels for additional regulatory requirements. Yet it will probably still make a trade dispute more likely as all producers will face additional challenges in gaining access to the EU market. An increase in the requirements will mean that some crops that currently qualify under the EU's default calculations will be pushed over the edge into non-compliance. These biofuels will face greater market access barriers. While it may increase the likelihood of a dispute based upon the protectionist nature of existing criteria, the additional ILUC factor does not seem to provide a basis for a dispute in itself, due to its even-handed application.

Rather than its discriminatory nature, the core difficulties with this approach have to do with the suitability of the regulation to the problem at stake, and whether it is more trade restrictive than necessary. However, in raising the overall emissions savings requirement and thus making the regulation more stringent, this approach will likely increase exporters' interest in examining whether sustainability regulation has disproportionate regulatory impacts in certain countries or aims to protect domestic markets.

ii. Article XX

[70] Laborde, above n. 25, at 18, 86.

a. Article XX(b) and Article XX(g)

As outlined above, it seems likely that the AB would consider these regulatory objectives to fall within the remit of either Article XX(b) (on protecting human, animal or plant life or health) or Article XX(g) (on conserving exhaustible natural resources). Although the regulatory approach of raising emissions levels across the board differs, its goals are the same: to mitigate climate change through preventing ILUC-related emissions, and to counter other negative sustainability impacts of ILUC.

The approach is indirect with respect to achieving specific outcomes on ILUC, but it clearly addresses the goal of reducing emissions from biofuels production. It seems difficult to argue that its regulatory aims would include preventing any other negative impacts from ILUC such as deforestation and biodiversity loss.

The AB would need to consider whether creating an additional emissions savings requirement to reflect the impact of ILUC is necessary to achieve the EU's regulatory goals. The aspect of the necessity test that seems particularly problematic is establishing the contribution of the measure to achieving the regulatory goals. This approach does not rely upon assessing ILUC levels; therefore it will not face the same methodological scrutiny. Instead, it raises a different set of concerns. While it will self-evidently reduce emissions from biofuels production, this will not be tied to the EU's goal of reducing negative impacts of ILUC. If the EU stated that their intent was simply to reduce emissions, there would be no clear justification for adding an additional level of emissions savings. It would also be difficult to justify the basis for calculating a particular requirement of emissions savings. If the EU relates this level of emissions savings to ILUC, it will not prove compelling, as there is no guaranteed correlation. There does not seem to be a clear basis for raising this level apart from preventing ILUC-related emissions.

The indirectness of this approach suggests that the EU is not seeking a very high level of protection against ILUC. As outlined above, the AB might also recommend other reasonably available approaches that would be less trade-restrictive and equally effective in achieving the EU's (low) desired level of protection.

Raising all emissions savings requirements equally does seem more likely to comply with the second requirement of Article XX(g): the measure must be taken in

conjunction with restrictions on domestic production or consumption. With respect to this component, the approach has an advantage over feedstock-specific options.

c. Article XX chapeau

The addition of higher regulatory requirements risks being arbitrary and unjustifiable. The imposition of additional greenhouse gas requirements will be undertaken without consultation with other Member States. Further, the justification for doing so, ILUC, is controversial and not backed by clear international standards.

With respect to the flexibility of the measure, trade partners might criticize the imposition of additional emissions savings requirements. It is indiscriminate; therefore it is inflexible with respect to the impact of different feedstocks on ILUC-related emissions. Instead, it imposes an equal regulatory burden on biofuels that may have no impact on ILUC-related emissions whatsoever and those that are its primary drivers. This is the opposite problem from that posed by the first two regulatory options, which identify particular biofuels that drive ILUC.

Finally, with respect to whether the measure is a disguised restriction on trade, the AB would examine its 'design, architecture and revealing structure' to determine whether its intent was protectionist.[71] Again, the approach is formally even-handed, and has exactly the same impact on domestic and foreign producers. However, in imposing additional requirements and pushing more biofuels out of conformity with EU targets, the measure also risks leading to more trade complaints, and scrutiny of the EU's emissions savings rationale and methodology more generally.

iii. TBT Agreement

a. TBT 2.2

Many of the same concerns regarding the lack of clarity of this regulatory approach would arise under Article XX and TBT 2.2. Under TBT 2.2, the AB would need to ensure that a technical regulations was not 'more trade-restrictive than necessary to fulfil a legitimate objective, taking account of the risks non-fulfilment would create'. As previously reviewed, in *US – Tuna II*, the AB established an approach to this necessity test that involved evaluating the degree of contribution the measure makes to the legitimate objective, whether a reasonably available less trade-restrictive

[71] *EC – Asbestos,* Panel Report, above n. 66, at para. 8.236.

measure could achieve the same objective, and the risks of non-fulfilment.

To review the shortcomings of the approach once again, if the legitimate objective specifically had to do with ILUC-related emissions reduction, then it seems difficult to argue that this regulatory approach would be an effective means of fulfiling this objective. If the EU argued more generally that their intent was to reduce emissions from biofuels production, this would raise questions about why it was necessary, and whether it was effective, to raise their requirements from those established in the original RED and FQD. The additional regulation would only address a small percentage of emissions and leave unaddressed the larger issue of agricultural land-use change. This would make it easier to argue that another, less trade-restrictive means was reasonably available, perhaps a multilateral approach that attempted to address the problem on a wider scale.

Not addressing ILUC poses a serious risk to the EU's regulatory objective, as it could undermine their goal of reducing emissions through the RED and the FQD. There are also global environmental risks that result from greenhouse gas emissions. However, it seems arbitrary that the EU would increase their emissions savings requirements after the RED and FQD have already come into force. The lack of clear scientific information underlying ILUC makes it difficult to justify a particular emissions savings requirement.

4. Analysis

The proceeding analysis suggested that the options the EU has proposed for regulating ILUC all risk violating WTO law. Many of these trade concerns result from two interrelated problems. First, ILUC is an emerging environmental problem. This helps explain the thin and uneven body of scientific research, as well as the controversy about the methodological basis of ILUC calculation and ILUC's contribution to global warming. These factors makes it easier to argue that whatever methodological approach the EU adopts has been designed to discriminate against or between imported goods. The fact that the problem is not well-recognized also underlies the lack of international standards and multilateral agreements. It takes time and political will to establish broad consensus. Yet this also may be problematic from

a WTO perspective, as it suggests that the EU is undertaking a unilateral form of negotiation.

Second, ILUC is extremely complex. This casts doubt on the EU's methodological approach, and makes scientific assessment more difficult and controversial. The fact that ILUC involves agricultural market dynamics that span international borders may lead to the critique that the EU's approach of regulating individual producers is arbitrary. Indeed, ILUC's complexity also creates domestic challenges. There may be backlash about the effectiveness of the response, and political pressure to avoid negative impacts on industry.

As this suggests, these problems do not have to do with discrimination, as such. Instead, the attempt to respond to ILUC results from internal and external pressure regarding the fact that EU alternative energy targets may have perverse impacts. Rather than an existing environmental problem, these options respond to a problem the EU helped create by mandating biofuels use. Thus, the EU is examining regulatory options to respond to this issue, despite the fact that all of these options will likely have a negative impact on domestic producers.

The complexity of regulating ILUC may lead to the perception that the EU is simply creating bad regulation, which should be streamlined, standardized or eliminated. However, this is not the function of the WTO. Instead, WTO disputes have repeatedly affirmed that Member States determine the regulatory objectives they wish to pursue and the level of protection they seek.

It would be possible to interpret the relevant provisions in a way that was more deferent to emerging environmental regulation. For example, in the context of the NTP of Article III(4)/TBT 2.1, one weak point of a feedstock-based approach to regulating biofuels is that a country could argue that ILUC values were calculated in order to discriminate against certain biofuels. The emphasis in Article XX/TBT 2.2 on justifying the contribution of the measure to the regulatory aim also opens the door to criticism that particular methodologies are not effective in achieving a regulatory goal. In both cases, an underlying argument is that it may have been easier for the EU to manipulate the science due to methodological uncertainties. In such a circumstance, the AB should also take into account, either formally or informally, the precautionary principle. Even if the science is uncertain, if the measure also disciplined domestic feedstocks, this suggests that it is not protectionist by nature.

If there were an implicit spectrum where the more complex and process-oriented a regulation, the more likely to violate WTO law, ILUC regulation would be on the outer extreme. Regulations based not on the physical characteristics or functionality of a product, but the way in which it is produced, are known as non-product related Process and Production Method (NPR PPM)-based regulations. Technically, ILUC regulations are *not* based upon NPR PPMs. They do not focus on characteristics of the production processes for biofuels for the EU market. Instead, they focus on the implications of growing a particular crop with respect to the agricultural production system as a whole. For ILUC regulations, new terminology would be necessary in order to extend the concept of process-orientation even further.

The bias that process-oriented regulations are identified with hidden protectionism has been prevalent among WTO Members.[72] However, though it has never been stated explicitly, WTO jurisprudence has demonstrated that NPR PPMs are not always WTO-illegal.[73] If the AB adopted a deferent position toward such process-oriented regulation, this would also improve the chances that ILUC regulation would be WTO-compatible.

Another concern raised in the context of the Article XX(b) and TBT 2.2 necessity tests is that the measure may not contribute the EU's regulatory goal of reducing ILUC-related emissions as a whole, as it only applies to biofuels. Biofuels represent only approximately 2 per cent of global agricultural production.[74] The 2011 IFPRI report raised this concern. The report gave the example that agricultural trade liberalization from the successful conclusion of the Doha Development Agenda round of negotiations would result in greater ILUC emissions than biofuels targets.[75] This argument can be countered without denying the importance of responding to ILUC as a whole. Under the RED, EU consumers are subsidizing biofuels with the explicit

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[72] This view is summarized by M Echols, 'Biofuels Certification and the Law of the World Trade Organization', International Centre for Trade and Sustainable Development ('ICTSD'), Programme on Agricultural Trade and Sustainable Development. Issue paper no. 19, August 2009, 33: *The details of the biofuels policy should help to justify the choice of targeted processes, products and benefits, and whether there will be a product focus (such as a percentage biofuels content for gasoline, or research support for next-generation products) or a production focus (a ban on imports of biofuels from deforested lands, or support for biofuels made using a particular process). The former is a standard goods-based approach. The latter involves a PPM, which is usually looked upon with some skepticism and the belief that it will be a disguised protectionist measure.*

[73] *See, eg, US – Tuna II,* above n. 51; *US – Shrimp*, above n. 60.

[74] 'Towards Sustainable Production and Use of Resources: Assessing Biofuels' United Nations Environment Programme (2009), 18.

[75] Laborde, above n. 25, at 86.

understanding that they will contribute to greenhouse gas emissions savings. There is a fundamental link between addressing ILUC and achieving the aim of the RED.

With respect to concerns that the measure was ineffective as it penalized producers who were not contributing to ILUC directly, the AB should also take into account the fact that the overall regulatory goal of reducing ILUC was compelling. As long as it applied to both domestic and foreign producers, it would be appropriate to regulate biofuels producers in this manner.

Though it is not a part of the original treaty text, the AB's interpretation of the Article XX chapeau suggests the importance of examining whether Members have pursued a negotiated solution to the regulatory objective at stake (though it does not require a successful conclusion). Yet one impact of this approach is that it emphasizes not only preventing discrimination but also bringing about harmonization, which is not the goal of the WTO. Therefore, again, it is useful to consider whether a particular regulation represents an important environmental objective, rather than focusing on procedural requirements that aim to bring national regulation into a multilateral framework. The underlying intent of these interpretations is to avoid losing the forest (avoiding discrimination) for the trees (the lack of maturity of the methodology).

5. Conclusion

It might be said that ILUC is a perfect storm for EU biofuels regulation. Countervailing forces have conspired to put the EU in a difficult position. On the one hand, they have an obligation to respond to a problem that risks turning their regulatory goal on its head: ILUC could well mean that fulfilling the requirements of their renewable energy Directives would lead to higher emissions overall. On the other hand, the addition of regulatory burdens to respond to ILUC will be unpopular with both domestic and foreign biofuels producers, and also may not be compatible with WTO law.

This analysis of the compatibility of the EU's proposed regulatory options with GATT Articles I, III and XX and the TBT Agreement Articles 2.1 and 2.2 is very preliminary. The outcome of a dispute would depend on the details of the EU's regulation and how the AB interpreted relevant provisions of WTO law. Although it is not possible to predict the outcome of a dispute, it is clear that all of the regulatory options that the EU has proposed risk violating WTO law.

These challenges result from inherent characteristics of ILUC, particularly its complexity and recent emergence as an environmental problem. These challenges do not in principle suggest that a regulation violates WTO law's core function of preventing discrimination between or among WTO Members. Of course, not all environmental regulation is altruistic; some does intend to protect domestic markets. However, the WTO should ensure that measures without protectionist intent are not swept away in the process of identifying protectionism.

WTO law may pose particular constraints for emerging environmental problems. Yet multilateral solutions are compromise-driven, and may not respond adequately when they emerge. Barring a strong international framework for combatting an environmental problem, countries may be tempted to set unilateral regulation to respond more immediately. These issues are applicable not only to ILUC regulation, which attempts to mitigate climate change driven by agriculture, but also climate change regulation more generally. ILUC is also a result of complex causal relationships; it is process-, rather than product-oriented. Thus these features define not only ILUC but also a larger set of emerging environmental problems.

There is a spectrum of possible interpretation of the WTO-compatibility of ILUC regulation. As outlined in the above analysis, the AB would be able to adopt a more deferent approach within the context of the existing Articles. In interpreting the WTO-compatibility of ILUC regulation, the AB is in a difficult position of evaluating environmental goals outside their core area of expertise. Yet unavoidably, not only do AB decisions reflect the influence of emerging environmental norms, they also have the potential to further shape their evolution.

Chapter 5

Competition and beyond in the interpretation of the National Treatment Principle

1. Introduction

Thus far this thesis has focused on the characteristics of sustainability regulation. It has outlined features of the EU criteria, such as its conceptual breadth and complexity, its response to emerging environmental problems, and its process orientation and extra-territorial impacts. Regulations that exhibit such characteristics raise challenges of WTO law; the thesis has focused its analysis of these challenges primarily on GATT Article XX ('Article XX') and the TBT Agreement Article 2.2 ('TBT 2.2').

The underlying concern is that the AB may tilt the balance toward trade liberalization at the expense of appropriate deference to national sustainability regulation. The next two chapters focus on this balancing process in the context of the National Treatment Principle ('NTP'). These chapters also identify the potential for 'imbalance' through the mechanisms by which the AB identifies protectionism. However, rather than the regulatory characteristics that may lead to this problem, these chapters focus on the interpretation of components of the NTP outlined below. There is a range of potential interpretation; however, past disputes reveal that there may be a bias toward trade liberalization.

Along with the Most Favoured Nation Principle,[1] the NTP forms the foundation of WTO law's non-discrimination provisions. Its basic role is to protect equality of competitive opportunities between imported and domestic products. Its adjudication requires balancing between WTO obligations on the one hand and Member States' sovereignty to pursue regulatory goals on the other. The NTP would likely be central to a dispute regarding EU biofuels sustainability criteria. An importing country could complain that the criteria were crafted to award preferential

[1] See Section 9 for more discussion of the MFN Principle.

treatment to domestic biofuels, while discriminating against imported biofuels. The NTP is an important component in many WTO covered agreements. Due to particular relevance to biofuels sustainability criteria, this chapter focuses on the NTP as applied in GATT Article III and the TBT Agreement Article 2.1 ('Article III' and 'TBT 2.1').

The interpretation of the NTP, and specifically the balance it strikes between national sovereignty and WTO law, is one of the central issues in the interpretation and application of WTO law. For this reason, it has been subject to numerous analyses from both academics and practitioners. Given the depth of the literature, there is no way that this chapter can be comprehensive in its treatment. However, because it is so often analysed, it is useful to conclude the substantive analysis of this thesis by reflecting on the interpretation of the NTP and its relationship with EU biofuels sustainability criteria.

This chapter focuses on an issue of particular importance. This is the tension in NTP disputes between objective evaluation of competitiveness between products and a more interpretive approach that takes into account a wider range of factors, including the policy objective at stake. The chapter examines two interrelated facets of this larger issue: 1) the role of market-based evidence; and 2) the influence of policy objectives. There has been a range of interpretation of these two issues, and the interpretation adopted has important implications for the balance struck between trade liberalization and national regulatory autonomy.

The NTP has two main components, and competition is theoretically central to both. First, the AB must determine if products are 'like'. The AB has repeatedly affirmed that 'like' products are competitive products. Second, the AB must determine if the measure discriminates against imported products. This discrimination may be either *de jure* or *de facto*. The jurisprudence on this requirement has focused on whether the measure has a detrimental impact upon the competitiveness of imported products with respect to domestic ones.[2]

The emphasis on competitiveness as the salient concern suggests that the process of establishing a violation will be simple: the AB simply must evaluate the nature of the competitive relationships between the products in dispute by analysing market evidence. However, both when establishing product 'likeness' and also the

[2] These statements are documented in Section 4 of the paper.

existence of protectionism, the AB has consistently made clear that this type of market evidence is not essential.

Under the 'like' products test, they have reasoned that a regulation in dispute may distort the conditions of competition, therefore rendering impossible an objective assessment of whether goods are in competition (and therefore 'like'). Thus, they have suggested that it may be necessary to take into account more speculative information, such as latent competition, and evidence from other similar markets.

When determining protectionism, the rejection of evidence has been based upon the reasoning that relying upon a so-called 'trade effects' test may be misleading, as even a clearly protectionist measure may not be demonstrated by trade volumes. Instead, the evaluation of protectionism necessitates examining the *structure* and *application* of the measure. These are somewhat elusive concepts, leading to the criticism that this approach rests upon 'an abstract notion of *lack of regulatory neutrality*.'[3]

This is important with respect to the balancing process. The AB's underlying concern is that relying solely upon market analysis would weaken the NTP. To the extent that moving away from a reliance on evidence enables a more speculative approach, employed to strengthen the enforcement of WTO law, it implies that the balance is being tipped at the expense of domestic regulatory autonomy. Yet relying upon analysis of the effects of a measure would not be empowering for national regulation either. If every measure with adverse effects on foreign producers automatically violated the NTP, this would suggest that the WTO was an instrument of deregulation rather than nondiscrimination.[4] Thus, some degree of subjective discretion is unavoidable when balancing market evidence and stated regulatory intent to determine if a measure is designed to discriminate against imported products.

This emphasis on competition as the central consideration of the NTP leads to potential discord between economic evidence of competitiveness between products, with its emphasis on objective, measurable outcomes, and the need to determine the legitimacy of trade-restrictive regulation with reference to more 'subjective' value

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[3] H Horn and PC Mavroidis, 'Still Hazy after All These Years: The Interpretation of National Treatment in the GATT/WTO Case-law on Tax Discrimination' (2004) 15(1) *European Journal of International Law* 39, 50.

[4] G Verhoosel, *National Treatment and WTO Dispute Settlement: Adjudicating the Boundaries of Regulatory Autonomy* (Oxford and Portland, Oregon: Hart Publishing, 2002) 48. *See also* GATT Panel Report for the unadopted *US – Taxes on Automobiles*, DS31/R, 11 October 1994, 5.24.

judgments.[5] The rejection of evidence leads to a situation in which more interpretation is required in order to determine whether a violation has occurred.

This process forms the focus of the second part of the chapter; as will be discussed, it is of central importance to environmental regulation like EU biofuels sustainability criteria. In some disputes the AB has emphasized the existence of negative competition impacts on imported products as a decisive criterion. However, in others the AB has further clarified that a detrimental impact is permissible if it results from legitimate regulatory distinctions rather than the desire to protect domestic products. This provides an additional step through which the AB can recognize the WTO compliance of non-protectionist regulation even if it has a negative impact on imported products.

Recent TBT AB Reports suggest an evolution toward this more deferent approach. It is unclear whether these developments demonstrate a general evolution in the AB approach or reflect the differences between the TBT Agreement and the GATT. In the GATT, if a measure is not in compliance with Article III but conforms with Article XX, it will be in compliance overall. However, under the TBT Agreement, even if a measure complies with TBT 2.2 Members will need to bring it into conformity with TBT 2.1. Thus a more deferent approach under TBT 2.1 may be appropriate as a counterbalance to the increased intrusiveness of the provision.

TBT 2.1's process of considering whether *regulatory distinctions* are legitimate is distinct from TBT Article 2.2 which considers whether *policy objectives* are legitimate. The former suggests that the AB is not evaluating the importance of the values but rather considering how the measure is structured. The latter involves an evaluation of the policy goal itself. While this is a fundamental distinction with respect to the nature of the provisions, the chapter speculates that it may be difficult to draw the line in some cases.

Finally, the chapter examines the compatibility of EU biofuels sustainability criteria with the NTP. The analysis focuses on how the interpretation of these two issues, the treatment of evidence and the role of policy objectives, would influence the balance struck between deference to national law and enforcement of WTO law.

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[5] *See, eg,* P Low, G Marceau, J Reinaud, 'The Interface Between the Trade and Climate Change Regimes: Scoping the Issue' (2011) Staff Working Paper ERSD-2011-1, World Trade Organization, Economic Research and Statistics Division, 15.

2. The NTP in GATT Article III

The majority of complaints under GATT Article III cite violations of either subparagraph 2 or subparagraph 4. Both are interpreted with reference to the same chapeau. Both focus on internal measures and whether they favour domestic products; Article III(2) deals with taxation, and Article III(4) regulation.

Article III(1), the chapeau, reads:

> *The Members recognize that internal taxes and other internal charges, and laws, regulations and requirements affecting the internal sale, offering for sale, purchase, transportation, distribution or use of products, and internal quantitative regulations requiring the mixture, processing or use of products in specified amounts or proportions, should not be applied to imported or domestic products so as to afford protection to domestic production.*[6]

Article III(2) reads:

> *The products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to like domestic products. Moreover, no contracting party shall otherwise apply internal taxes or other internal charges to imported or domestic products in a manner contrary to the principles set forth in paragraph 1.*[7]

The second sentence has an interpretive note, which reads:

> *A tax conforming to the requirements of the first sentence of paragraph 2 would be considered to be inconsistent with the provisions of the second sentence only in cases where competition was involved between, on the one hand, the taxed product, and, on the other hand, a directly competitive or substitutable product which was not similarly taxed.*

In the first sentence of Article III(2), there are two key questions. First, are the domestic and imported products 'like'? Second, if they are ''like',' is the imported product taxed 'in excess of' the domestic product? In the second sentence of Article III(2), combined with the Interpretive Note and Article III(1), to which it explicitly refers, the first key question is: are the imported and domestic product 'directly competitive or substitutable' ('DCS'). The second part of Article III focuses on determining whether the tax discriminates against imported products. In this context, AB must establish whether the two products 'not similarly taxed', and finally, does

[6] Marrakesh Agreement Establishing the World Trade Organization, Article III(1), 14 April 1994, GATT Secretariat, *The Results of the Uruguay Round of Multilateral Trade Negotiations, the Legal Texts* (Cambridge: Cambridge University Press, 1994) at 428.
[7] Ibid at Article III(2).

dissimilar taxation operate in a manner 'so as to afford protection' ('SATAP') to domestic production?

Article III(4) reads:

> *The products of the territory of any contracting party imported into the territory of any other contracting party shall be accorded treatment no less favourable than that accorded to like products of national origin in respect of all laws, regulations and requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use. The provisions of this paragraph shall not prevent the application of differential internal transportation charges which are based exclusively on the economic operation of the means of transport and not on the nationality of the product.*[8]

The key questions are: first, are the domestic and imported products 'like'? Second, if they are, is the imported product receiving treatment 'no less favourable' than that accorded to the domestic product? This paragraph does not include the concept of 'directly competitive or substitutable.'

As part of the legislative matrix available under Article III, in the event that the measure in dispute has been adopted in support of a public policy goal, such as protection of human health or exhaustible natural resources, or the prevention of deceptive practices, *inter alia*, a Member State can defend their tax or regulatory measure under Article XX, the General Exception. A measure found to violate Article III may be justified under Article XX if, in the language of the chapeau, it is 'not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade'. Article XX has been discussed at length in Chapters 3 and 4.

3. The NTP in the TBT Agreement

The TBT Agreement deals with technical regulations, standards and conformity assessment. TBT Article 2.1 contains a National Treatment provision, which reads:

> *Members shall ensure that in respect of technical regulations, products imported from the territory of any Member shall be accorded treatment no less favourable than that accorded to like products of national origin and to like products originating in any other country.*[9]

[8] Ibid at Article III(4).
[9] Ibid, Agreement on Technical Barriers to Trade at 122.

Due to the overlap in their jurisdictions, there may be initial uncertainty with respect to which WTO provision, Article III or the TBT Agreement, is most relevant to a measure in dispute. Because the definition of 'technical regulation' is selective, until recently, it has not been the focus of many disputes. This chapter thus evaluates three recent disputes: *US – Clove Cigarettes*,[10] *US – Tuna II*[11] and *US – COOL*, that have fallen under the TBT Agreement.[12] (The *US – COOL* AB Report has not yet appeared at the time of this writing.) Not surprisingly, given their pioneering role, recent Panel Reports dedicate much time to explicating the differences between the application of Article III and TBT 2.1. These interpretations will be discussed subsequently. Overall, however, it can be said that the interpretation of the concepts of 'like' products and 'less favourable treatment' has been very similar between Article III(4) and TBT 2.1. The interpretation of the National Treatment provision in recent TBT disputes, as well as their subject matter, is very relevant to both a hypothetical 'EU – Biofuels' dispute and also the adjudication of disputes on environmental regulations more generally. For this reason, this chapter pays special attention to these disputes.

The TBT Agreement also contains a component similar to GATT Article XX, though it does not contain a closed list of specific negotiated exceptions, but instead covers any 'legitimate objective'. Further, it does not follow a rule/exception structure; even if a measure is in compliance with TBT 2.2 it still must be brought into conformity with TBT 2.1. Again, TBT 2.2 has been discussed earlier in the thesis.

4. Competitiveness in Article III and TBT 2.1

As summarized by the WTO Secretariat, 'The essence of the principle of national treatment is to require that a WTO Member does not put the goods or services or persons of other WTO Members at a *competitive disadvantage vis-à-vis* its own goods

[10] WTO Panel Report, United States – Measures Affecting the Production and Sale of Clove Cigarettes *(US – Clove Cigarettes)*, WT/DS406/R, adopted 2 September 2011, and Appellate Body Report, WT/DS406/AB/R, adopted 4 April 2012.
[11] WTO Panel Report, United States – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products *(US – Tuna II)*, WT/DS381/R, adopted 15 September 2011, and Appellate Body Report, WT/DS381/AB/R, adopted 16 May 2012.
[12] WTO Panel Report, United States – Certain Country of Origin Labelling (COOL) Requirements *(US – COOL)*, WT/DS386/R, adopted 18 November 2011.

or services or nationals.' [Emphasis added][13] This has been oft-reinforced in the disputes. The AB stated in *Japan – Alcoholic Beverages II*: 'Article III protects expectations…of the *equal competitive relationship* between imported and domestic products'. [Emphasis added][14] The AB in *Korea – Alcoholic Beverages* clarified that: 'The context of the competitive relationship is necessarily the marketplace since this is the forum where consumers choose between different products.'[15]

For this reason, assessing compliance with the NTP requires considering the existence and nature of competitive relationships between products in dispute. The AB in *EC – Asbestos* has stated that '…a determination of "likeness" under Article III:4 is, fundamentally, a determination about the nature and extent of a competitive relationship between and among products'.[16] This approach has been adopted in many disputes. For example, the 2011 AB Report for *Philippines – Distilled Spirits* used the same language as the *EC – Asbestos* AB Report above, specifically applying it to the 'like' products test of Article III(2).[17]

This rationale has also extended to the TBT. The Panel in the TBT dispute *US – Tuna II* directly quoted the AB's precedent in *EC – Asbestos*, above, concluding: 'Although this statement was made in the context of Article III:4 of the GATT 1994, we find it pertinent also to an interpretation of the terms "like products" in Article 2.1 of the TBT Agreement.' Further, the AB in *US – Clove Cigarettes* stated that:

> *We agree that the very concept of "treatment no less favourable", which is expressed in the same words in Article III:4 of the GATT 1994 and in Article 2.1 of the TBT Agreement, informs the determination of likeness, suggesting that likeness is about the "nature and extent of a competitive relationship between and among products".*[18]

Article III(2) contains an additional test that establishes whether products in competition are 'directly competitive or substitutable.' As the AB has affirmed, the

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[13] 'The Fundamental WTO Principles of National Treatment, Most-Favoured-Nation Treatment and Transparency', Background Note by the Secretariat, Working Group on the Interaction Between Trade and Competition Policy, WT/WGTCP/W/114, 14 April 1999, 4.
[14] WTO Panel Report, Japan – Taxes on Alcoholic Beverages *(Japan – Alcoholic Beverages II)*, WT/DS8/R; WT/DS10/R; WT/DS11/R, adopted 11 July 1996; and Appellate Body Report, WT/DS8/AB/R; WT/DS10/AB/R; WT/DS11/AB/R, adopted 4 October 1996, para. 109.
[15] WTO Panel Report, Korea – Taxes on Alcoholic Beverages *(Korea – Alcoholic Beverages)*, WT/DS75/R; WT/DS84/R, adopted 17 September 1998, and Appellate Body Report, WT/DS75/AB/R; WT/DS84/AB/R, adopted 18 January 1999, para. 114.
[16] WTO Appellate Body Report, European Communities – Measures Affecting Asbestos and Asbestos-Containing Products *(EC – Asbestos)*, WT/DS135/AB/R, adopted 12 March 2001, para. 99.
[17] WTO Appellate Body Report, Philippines – Taxes on Distilled Spirits *(Philippines – Distilled Spirits)*, WT/DS396/AB/R; WT/DS403/AB/R 21, adopted December 2011, para. 170;
[18] *US – Clove Cigarettes*, Appellate Body Report, above n. 10, at para. 111.

importance of competitiveness is self-evident in the term itself. For example in *Korea – Alcoholic Beverages*, the AB stated that:

> *It is evident from the wording of the term that the essence of that relationship is that the products are in competition. This much is clear both from the word "competitive" which means "characterized by competition"* [1]*, and from the word "substitutable" which means "able to be substituted".*[19]

The establishment of protectionism under Article III(2) is also closely linked to market competitiveness. The AB in *Chile – Taxes on Alcoholic Beverages*[20] stated that '… [Article III(2), second sentence]… provides for equality of competitive conditions of *all* directly competitive or substitutable imported products, in relation to domestic products….'[21]

Under Article III(4), the dispute settlement bodies consider whether an imported product is receiving treatment 'no less favourable' than that accorded to the 'like' domestic product. The AB in *Dominican Republic – Cigarettes* stated that 'a measure accords less favourable treatment to imported products if it gives domestic like products a competitive advantage in the market over imported like products'.[22] This approach has been repeated in many other disputes.

Recent TBT Panel Reports also affirm this approach to 'less favourable treatment'. For example, the Panel in *US – COOL* has stated that: 'As we explained, like Article III:4 of the GATT 1994, Article 2.1 is concerned with the equality of competitive conditions between domestic and imported products. This has been interpreted as meaning that "a measure accords less favourable treatment to imported products if it gives domestic like products a competitive advantage in the market over imported like products".[23] The AB Report of *US – Clove Cigarettes* also affirmed the existing approach with respect not only to 'less favourable treatment' but also the 'like' products test, as documented below.

5. The role of evidence in Article III/TBT 2.1

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[19] *Korea – Alcoholic Beverages*, Appellate Body Report, above n. 15, at para. 114.
[20] WTO Panel Report, Chile – Taxes on Alcoholic Beverages, *(Chile – Alcoholic Beverages)*, WT/DS87/R; WT/DS110/R, adopted 15 June 1999, and Appellate Body Report, WT/DS87/AB/R; WT/DS110/AB/R, adopted 13 December 1999.
[21] Ibid, Appellate Body Report at para. 67.
[22] WTO Panel Report on Dominican Republic – Import and Sale of Cigarettes *(Dominican Republic – Cigarettes)*, WT/DS302/R, adopted 26 November 2004, and Appellate Body Report, WT/DS302/AB/R, adopted 25 April 2005, para. 93.
[23] *US – COOL*, Panel Report, above n. 12, at para. 7.313.

Evaluating competition between products is at the centre of determining a violation of the NTP. This leads to the important question of how this competitive relationship is to be measured, and how strictly it should rely upon evidence. An approach based strictly upon evidence drawn from the countries in dispute would be based upon quantitative thresholds. Conversely, scrutinizing a measure's application requires more interpretation. With respect to these different approaches, the AB has been consistent about their position. While quantitative market analysis has formed a component of AB decisions, they have repeatedly affirmed that decisions should not rest upon such evidence. The next section discusses how this shapes the balance between national sovereignty and trade commitments.

A. Like/DCS products

Elasticity of substitution, or cross price elasticity, is a standard econometric means to quantify latent product demand. It establishes whether consumers will switch to the competing product if the price of the original product rises. Such an approach fits with the emphasis on competitiveness between products. The early WTO dispute *Japan – Alcoholic Beverages II* employed this approach when determining whether products were directly competitive or substitutable under Article III(2). The AB stated:

> *…the decisive criterion in order to determine whether two products are directly competitive or substitutable is whether they have common end-uses, inter alia, as shown by elasticity of substitution.'*[24]

However, in *Korea – Alcoholic Beverages*, the AB distanced themselves from the role of cross-price elasticity proposed in *Japan – Alcoholic Beverages II*. The AB quoted the Panel Report in concluding:

> *"[Q]uantitative analyses, while helpful, should not be considered necessary."[footnote eliminated] Similarly, "quantitative studies of cross-price elasticity are relevant, but not exclusive or even decisive in nature."*[25]

This dispute established an oft-replicated rejection of relying solely upon evidence in the context of the NTP. It focused on Korea's tax categories for alcoholic beverages. As a result of a surtax on the sale of distilled spirits, diluted soju benefitted from lower tax rates than imported distilled spirits. The Panel determined that

[24] *Japan – Alcoholic Beverages II*, Appellate Body Report, above n. 14, referencing Panel Report, at para. 6.22.
[25] *Korea – Alcoholic Beverages*, Appellate Body Report, above n. 15, at para. 109.

traditional shoju was DCS with some 'western style' liquors, and the dissimilar taxation was applied so as to afford protection to domestic products.[26]

The AB supported the Panel's conclusion that the relationship between the products was DCS. They clarified that 'We believe that the Panel uses the term "*nature* of competition" as a synonym for *quality* of competition, as opposed to *quantity* of competition.'[27] They rejected quantity for quality.

The rationale was that, with respect to like or DCS products, the influence of a regulation in dispute may distort competitiveness. Thus, competition *should have* existed, though it could not be evidenced. They stated:

> *A determination of the precise extent of the competitive overlap can be complicated by the fact that protectionist government policies can distort the competitive relationship between products, causing the quantitative extent of the competitive relationship to be understated.*[28]

This sentiment was echoed in the AB Report for the TBT dispute *US – Clove Cigarettes* in the context of the 'like' products test: 'We note, however, that, in determining likeness based on the competitive relationship between and among the products, a panel should discount any distortive effects that the measure at issue may itself have on the competitive relationship…'.[29]

This has methodological implications. Rather than accepting a lack of competitive relationship at face value, the AB in *Korea – Alcoholic Beverages* found it necessary to rely upon more speculative sources of evidence. They stated:

> *… the scope of the term "directly competitive or substitutable" cannot be limited to situations where consumers already regard products as alternatives. If reliance could be placed only on current instances of substitution, the object and purpose of Article III:2 could be defeated by the protective taxation that the provision aims to prohibit….In this case, the Panel committed no error of law in buttressing its finding of "present direct competition" by referring to a "strong potentially direct competitive relationship".*[30]

The Panel broadened the scope of applicable evidence. For example, they considered the possibility that lack of experience would artificially dampen consumer demand in Korea. Thus, the Panel suggested that there was potential for *future* competition when consumers in Korea became more familiar with the imported product.[31] This is a

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[26] Ibid at para. 2.
[27] Ibid at para. 133.
[28] Ibid, Panel Report at para. 10.42.
[29] *US – Clove Cigarettes*, AB Report, above n. 10, at para. 111.
[30] *Korea – Alcoholic Beverages*, Appellate Body Report, above n. 15, at para. 120, 124.
[31] Ibid at para. 110.

temporal extension. Also, they stated that evidence about consumer preference from a market with similar characteristics may have some relevance.[32] This is a geographic extension. In both cases they stated that this was not a general approach to DCS products, but would need to be determined on a case-by-case basis.

Korea contested the Panel's finding, stating:

> *Korea considers that, through the use of the term "nature of competition", the Panel has inserted a "vague and subjective element" which is not found in Article III:2, second sentence.*[33]

Korea felt that an absence of 'actual' competitive relationship between products in dispute should be interpreted as a strong indication that they were *not* 'DCS'.[34] They argued that potential competition was not covered by Article III(2). In bringing in evidence from the Japanese market, they accused the Panel of 'impermissibly broadening' Article III(2).[35]

By broadening the scope of applicable evidence, the dispute settlement bodies also broadened the jurisdiction of the NTP. If they had accepted the lack of competitive relationship between the products in the existing market, Korea would likely have been in compliance. A more speculative approach enabled a larger degree of interpretation, to the end of establishing that products in dispute were competitive.

This speculative approach is risky, as it is more activist about the boundaries of WTO obligations. For example, if consumers do not know about a product because of a measure in dispute, does this in itself suggest that the country is not complying with its GATT obligations? Also, a more speculative approach may be inaccurate. For example, the AB offered no criteria with which to establish if markets were sufficiently similar. Such an analysis should be approached with extreme caution, not only because it threatens the individual sovereignty of Member States but also because it may simply be wrong. Consumer behaviour may be irrational or unpredictable, and difficult to generalize.

The *Philippines – Distilled Spirits* AB Report referenced *Korea – Alcoholic Beverages* in adopting the position that there should not be an excessive reliance on quantitative evidence.[36] However, they also rejected cross-market comparison, stating:

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[32] Ibid at para. 137.
[33] Ibid at para. 132.
[34] Ibid at para. 5 - 6.
[35] Ibid at para. 136.
[36] *Philippines – Distilled Spirits,* above n. 17, at para. 207.

> *If two spirits are considered to be "like products" in a given market, this does not necessarily mean that they would be considered "like products" in another market…a panel needs to examine the nature and the extent of the competitive relationship between and among products, which will depend on the market where these products compete.*

This analysis addressed the designation of 'like' rather than 'DCS' products, a narrower category of comparison. However, the AB's observation is still relevant: in the Philippines, sugar-derived alcohols were marketed as 'whiskey' and 'brandy', a practice that would not have been acceptable to European consumers.[37]

A recent study on consumer preference for biofuels provides another, thematically relevant, example.[38] It analysed the purchasing habits of car owners with flex-fuel engines, which can take any blend of ethanol and gasoline. The concept behind the flex-fuel is that consumers will switch fuel type based upon which is cheapest, an easily measurable form of cross-price elasticity.

However, in Brazil, even when ethanol prices rose above those of gasoline, consumers did not switch. In Sweden, they did. Brazilian consumers felt less strongly that the ethanol and gasoline were directly competitive or substitutable. This demonstrates the diverse nature of markets; consumers in some countries may be economically irrational in valuing one choice over another.

The *Korea – Alcoholic Beverages* AB specifically advocated comparing markets with 'similar characteristics'. However, for an external body, such as a complaining government or the WTO dispute settlement system, to override differences between separate domestic markets on the basis of essential external characteristics seems to undermine the WTO commitment to respecting the sovereignty of each Member to set its own domestic regulations. In these examples, the extension of the evidence-gathering process tilted the balance toward the trade obligations under the NTP.

B. Less Favourable Treatment/SATAP

After advocating a more speculative approach to evidence under the DCS test, the AB in *Korea – Alcoholic Beverages* also distanced itself from the use of evidence in the SATAP test. They were concerned that relying upon quantitative data risked creating

[37] Ibid at para. 168.
[38] H Pacini and S Silveira, 'Consumer choice between ethanol and gasoline: Lessons from Brazil and Sweden' (2011) 39 *Energy Policy*, 6936 – 6942.

a 'trade effects test', under which the presence of discrimination would be determined based upon import volumes. They stressed that a violation should not be limited by such a requirement. Article III outlines a code of conduct for trade partners; thus, if it were to be applied exclusively in situations where discriminatory impact was already occurring, this would unduly limit its influence.

This has become a standard interpretation under the NTP, repeated and further elaborated in future disputes. For example, in *Thailand – Cigarettes (Philippines),* the Panel stated:

> *The analysis of whether imported products are accorded less favourable treatment requires a careful examination "grounded in close scrutiny of the 'fundamental thrust and effect of the measure itself", including of the implications of the measure for the conditions of competition between imported and like domestic products. This analysis need not be based on empirical evidence as to the actual effects of the measure at issue in the internal market of the Member concerned.*[39]

Focusing on application not evidence might lead to a more deferent approach to national regulation. The AB might consider that simply looking at trade effects would intrude excessively on domestic sovereignty, when the WTO is only supposed to prevent discrimination. On the other, hand, the AB might feel that looking at trade volumes limited the scope of the NTP, as there may be discriminatory treatment that is not reflected by trade volumes but still exists in the application of the regulation. Either position reflects the fact that interpretation rather than simply measuring is essential to evaluating a dispute. However, significantly, in its argumentation the AB has focused more on the latter issue.

Diverging approaches in the Panel and AB Reports in *US – Tuna II* are instructive. The Panel stated:

> *In the absence of further information as to what share of the US market Mexico might expect to secure in the absence of the measures at issue, we are not in a position to assess whether Mexico's level of participation in the US tuna market reflects a modification of the conditions of competition to the detriment of Mexican tuna products or whether it simply reflects Mexico's expected level of participation in the US market.*[40]

The Panel refused to interpret the evidence one way or another. By making a finding of less favourable treatment less likely, their approach deferred to the US. Indeed, based in part on this reasoning, they found the US to be in compliance with TBT 2.1.

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[39] WTO Appellate Body Report on Thailand – Customs and Fiscal Measures on Cigarettes from the Philippines *(Thailand – Cigarettes (Philippines),* WT/DS371/AB/R, adopted 17 June 2011, para. 129.
[40] *US – Tuna II* , Panel Report, above n. 11, at para. 7.359.

The AB contested the Panel's conclusion:

> *Moreover, it is well established that WTO rules protect competitive opportunities, not trade flows. [footnote omitted] It follows that, even if Mexican tuna products might not achieve a wide penetration of the US market in the absence of the measure at issue due to consumer objections to the method of setting on dolphins, this does not change the fact that it is the measure at issue… that denies most Mexican tuna products access to a "dolphin-safe" label in the US market.*[41]

The AB's statement serves to remind the Panel that they needed to consider the wider impacts of the measure as a whole. However, they suggested that this protectionist impact was a violation *irrespective* of the volume of imports. Namely, even if the measure were removed and trade volumes did not increase, it would still be in violation. This clearly prioritizes the application of the measure over a quantitative consumer demand analysis. However, this ruling goes so far as to challenge the notion that products must be in competition in order to be 'like'.

Overall, under both the 'like' products test and the 'less favourable treatment' determination, moving away from an evidence-based approach and relying upon more speculative methods to establish competitiveness has been used to extend the jurisdiction of the NTP, based on concerns that relying solely on objective quantitative analysis would weaken the NTP.

7. Product competitiveness/legitimate policy distinctions

To summarize the previous section, the central consideration when determining the nature of the competitive relationship between products in dispute is the application of the measure, rather than market evidence. The AB has repeatedly affirmed that determining a violation requires more than simply quantitative assessment. The dismissal of evidence, or use of speculative evidence, to establish that products are competitive, has been used to tilt the balance toward trade liberalization. Yet an interpretation- rather than evidence-based approach may also tilt the balance in the other direction.

This dichotomy forms the focus of this section. There has been a divided approach to interpreting the NTP. At times, the AB has concluded that a negative impact on competition (determined through a measure's application rather than

[41] Ibid, AB Report, at para. 239.

market evidence) automatically constitutes a violation of the NTP. At other times, the AB has further distinguished between protectionist measures and those whose purpose is 'innocent', even if they have negative impacts upon competitive opportunities for imported products.

The former approach gives the NTP a narrower band of compliance. The latter is more deferent, allowing for the possibility that the measure's objectives were neutral with respect to imports. The approach to this important issue under Article III(2), Article III(4) and TBT 2.1 has differed substantially. Therefore the following analysis is divided into separate sections for each.

A. Article III(2)

An analysis of some early rejected GATT Panel Reports under Article III(2), outlining the 'aim-and-effect' approach, helps to set the stage for an analysis of later jurisprudence. In these reports, the Panel specifically took into account whether the intent of the regulation was discriminatory in the context of the 'like' products test. In a 1992 GATT dispute under III(2), *US – Malt Beverages*,[42] the Panel decided that the determination of whether the products in dispute were 'like' should also regard the larger purpose of the Article, articulated in III(1), whose key concept is that a measure should not be applied so as to afford protection to domestic products. Thus, the Panel decided that, in the converse, Article III should not prevent measures *not* applied SATAP.

This argument was applied and extended in the unadopted GATT Panel report in the dispute *US – Taxes on Automobiles*.[43] The EC complained that a US luxury excise tax on automobiles that cost more than US $30,000 unfairly discriminated against European imports. The Panel stated that the purpose of the GATT was not to harmonize regulation but rather to lower barriers to trade; thus a measure not taken SATAP to domestic products was not in violation.[44] They concluded that, though it had a *de facto* effect of discriminating against imports, the tax did not have a discriminatory intent. This was because the technology to manufacture cheaper cars was not inherent to the US, nor were luxury cars inherently of foreign origin.[45] Thus,

[42] GATT Panel Report on United States – Measures Affecting Alcoholic and Malt Beverages *(US – Malt Beverages)*, DS23/R – 39S/206, adopted 19 June 1992.
[43] *US – Taxes on Automobiles,* above n. 4.
[44] Ibid at para. 5.8.
[45] Ibid at para. 5.24.

the question of whether a measure is discriminatory was resolved in part by examining whether the intent or 'aim' of the tax was to protect domestic products.

In *Japan – Alcoholic Beverages II*, the AB soundly rejected this 'aim-and-effect' approach. The AB argued that protective application need not be established as a part of the first sentence of Article III(2), containing the 'like products' test.

With regard to the second sentence, SATAP was not a question of intent – instead it had to do with how the measure was applied. They stated that;

> *We believe that an examination in any case of whether dissimilar taxation has been applied so as to afford protection requires a comprehensive and* ***objective*** *analysis of the structure and application of the measure in question on domestic as compared to imported products. We believe it is possible to examine* ***objectively*** *the underlying criteria used in a particular tax measure, its structure, and its overall application to ascertain whether it is applied in a way that affords protection to domestic products.*[46] *[Emphasis added]*

Such an approach, they suggested, would move away from the problem of subjectivity that results from trying to discern a government's aim. This influential statement has shaped the dispute settlement bodies' approach to determining the existence of protectionism in future disputes under Article III.

Under this established approach, with respect to 'like' products, even the smallest amount of 'excess' tax on imported can be considered protectionist. The AB reasoned that Article III(I) informs all of Article III's interpretation. Thus, although Article III(2) sentence one does not specifically reference Article III(1), if there is taxation 'in excess of' domestic 'like' products, this in itself amounts to a finding that a tax was applied 'so as to afford protection' to domestic products.[47]

With DCS products, it is also necessary to determine whether a measure has been applied 'so as to afford protection' to domestic products.[48] In this case, the *Japan – Alcoholic Beverages II* AB stated that 'the dissimilar taxation must be more than *de minimis*'; however, they did not specify a specific quantity.[49] Therefore, in general terms, if products are 'like' there is a stricter prohibition on differential treatment than if they are 'DCS'. The analysis of 'DCS' products leaves more room for the AB to conclude that the differential treatment may have been shaped by something other than protectionism. However, there is no specifically defined threshold in either case.

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[46] *Japan – Alcoholic Beverages II*, AB Report, above n. 14, at 28 – 29.
[47] Ibid at 23.
[48] Ibid at 27.
[49] Ibid at 30.

In *Chile – Alcoholic Beverages*, the AB reaffirmed its separation from the aim and effect approach, stating that 'The *subjective* intentions inhabiting the minds of individual legislators or regulators do not bear upon the inquiry, if only because they are not accessible to treaty interpreters.'[50] Following the AB in *Alcoholic Beverages II*, this establishes a dichotomy between subjective and objective, rejecting the former in favour of the latter.

They also stated:

> *We called for examination of the design, architecture and structure of a tax measure precisely to permit identification of a measure's objectives or purposes as revealed or objectified in the measure itself….**a measure's purposes, objectively manifested** in the design, architecture and structure of the measure, are intensely pertinent to the task of evaluating whether or not that measure is applied so as to afford protection to domestic production. [Emphasis added]*[51]

As this statement reveals, what the AB rejected was not incorporating a consideration of policy objectives ('a measure's purposes'), but doing so subjectively.

The AB cannot accept at face value a government's statement that a tax was not intended to be protectionist. However, the 'subjective' versus 'objective' dichotomy can be critiqued on several grounds. First, the role of 'subjective' regulatory intent in interpreting discrimination has not disappeared; instead it has been incorporated into the question of protective application. Indeed, all of the Article III(2) disputes considered herein have explicitly considered a responding government's stated intent, as it forms the central thrust of these governments' argument that the measure is not applied SATAP. The concept of 'revealing structure' was used in *Japan – Alcoholic Beverages II* to characterize the focus on objective application.[52] One author has noted that the phrase itself begs the question: revealing what? The answer: protective regulatory intent.[53]

Also, the dichotomy may imply a hierarchy. The use of the concept of subjectivity mirrors Korea's complaint against the Panel in *Korea – Alcoholic Beverages* that the use of speculative evidence was *subjective*. In both cases, subjectivity was the basis for dismissing an argument. In *Japan – Alcoholic Beverages II*, it was associated with a national government's argument as to why it is setting a particular regulatory goal.

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[50] *Chile – Alcoholic Beverages,* AB Report, above n. 20, at para. 62.
[51] *Dominican Republic – Cigarettes,* AB Report, above n. 22, at para. 71.
[52] *Japan – Alcoholic Beverages II*, AB Report, above n. 14, at 29.
[53] Verhoosel, above n. 4, at 55.

This also implies that the AB is objective. As repeatedly affirmed by the AB themselves, they are not simply making a quantitative analysis, but engaging in an act of judgment; judgment is inherently subjective. Further, the AB is enforcing WTO law and embodying its institutional mandate.[54] This is appropriate and in line with Member States' voluntary agreement to comply with WTO rules. However, objective discernment seems to imply that the dispute settlement bodies are arbiters of a neutral standard.

B. Article III(4)

Article III(4) does not consider whether products are DCS, but only establishes if they are 'like'. The AB in *EC – Asbestos* recognized that the interpretation of the term 'like' is therefore different. They stated that the definition of 'like' products under III(4) should be somewhere in between Article III(2)'s 'like products' and 'directly competitive or substitutable' products.[55] This can be seen as the general approach under Article III(4).

Along the same lines as in Article III(2), the question arises: once it has been established that products are 'like', is any differential treatment on imported products automatically a violation? It has been affirmed repeatedly that it does not.[56] After clarifying this point, the AB in *Korea – Beef* further stated that:

> *Whether or not imported products are treated "less favourably" than like domestic products should be assessed instead by examining whether a measure modifies the conditions of competition in the relevant market to the detriment of imported products.*[57]

This assessment has formed the baseline consideration in the less favourable treatment test. In some disputes, the AB considered that a negative impact on competitive opportunities was sufficient to constitute a violation. This approach, outlined in *US – Section 337,*[58] was further developed in *Korea – Beef*. It has been

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[54] This is supported by the fact that the WTO Secretariat has an influence on dispute outcomes, as it assists the Panel and in many cases makes recommendations that shape the outcome of the dispute.
[55] *EC – Asbestos*, above n. 16, at paras. 92 – 96.
[56] *See, eg,* WTO Panel Report on GATT United States – Section 337 of the Tariff Act of 1930 *(US – Section 337)*, BISD 365/345, adopted 7 November 1989, at para. 5.11; WTO Appellate Body Report on Korea-Measures Affecting Imports of Fresh, Chilled and Frozen Beef *(Korea – Beef)*, WT/DS161/AB/R; WT/DS169/AB/R, adopted 11 December 2000, at para. 137*; Thailand – Cigarettes (Philippines)*, above n. 39, at para 128*; EC – Asbestos*, above n. 16, at para. 100.
[57] *Korea – Beef,* ibid at para. 137.
[58] *US – Section 337,* above n. 56.

employed frequently, for example, in the recent AB Report of the dispute, *Thailand – Cigarettes (Philippines):*

> *… what is relevant is whether such regulatory differences distort the conditions of competition to the detriment of imported products. If so, then the differential treatment will amount to treatment that is "less favourable" within the meaning of Article III:4.*[59]

The AB further clarified that there must be a 'genuine relationship' between the measure and its adverse impacts upon competitive opportunities for imported products in order for a violation to occur.[60]

In *EC – Asbestos*, the AB developed a two-step analysis to determining less favourable treatment: first, establishing whether the 'like' products were treated differently; second, determining whether that differential treatment constituted less favourable treatment.[61] However, they did not elaborate as there had been no appeal from the Panel's ruling on this issue.

In *Dominican Republic – Cigarettes*, the AB further clarified:

> *However, the existence of a detrimental effect on a given imported product resulting from a measure does not necessarily imply that this measure accords less favourable treatment to imports if the detrimental effect is explained by factors or circumstances unrelated to the foreign origin of the product….*[62]

The interpretation of less favourable treatment now includes the possibility that a measure may have a negative impact on conditions of competition and still not violate the NTP, as long as that impact can be explained by something besides protectionism. In that it is not a strictly market-based approach, this more closely resembles the 'aim-and-effect' approach rejected under Article III(2), but for the important distinction that the consideration of policy objectives is housed in the less favourable treatment test rather than the 'like' products test. This has not become a universal approach; this extra step is only included in certain disputes, determined on a case-by-case basis.

In theory, the evaluation of less favourable treatment should not be influenced by any consideration of the extent to which the public policy objectives are compelling, as this would involve a type of rationale limited to GATT Article XX. Instead, along the lines of Article III(2) the determination should focus solely on how the measure is applied. Even so, if a negative impact on conditions of competition can

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[59] *Thailand – Cigarettes (Philippines)*, above n. 39, at para. 128.
[60] Ibid at para. 134.
[61] *EC – Asbestos*, above n. 16, at para. 100.
[62] *Dominican Republic – Cigarettes,* AB Report, above n. 22, at para. 93

be explained by factors unrelated to the origin of the product; this inherently provides more deference to public policy objectives.

This issue is significant with respect to non-product related process and production methods ('NPR PPMs'). The AB has never directly addressed the legality of NPR PPMs based upon how a product is produced, and existing jurisprudence is ambiguous.[63] There have been several instances in which the AB ruled against NPR PPM regulations, though these were based upon the characteristics of the producer, rather than how products were produced.[64] Therefore, despite the precedent of *US – Tuna II*, discussed earlier in the thesis, there is still some ambiguity.

A country may treat certain products unequally because of how they are produced; for example, biofuels grown in highly biodiverse areas. If NPR PPMs-based regulatory distinctions are not recognized as a valid basis for discrimination, and the regulated products are imported but not produced domestically, it would be easy to conclude that the measure was discriminatory.

The approach taken in *Dominican Republic – Cigarettes* provides more deference to regulation based upon NPR PPMs. For example, the AB might evaluate the application of the measure and determine that land-use criteria differentiating sustainable from conventional biofuels are not discriminatory as they are unrelated to the foreign origin of the product. In this case they would not violate the NTP, even if they have a negative impact on conditions of competition for imported biofuels. The wider implication is that NPR PPMs are acceptable in principle as long as the production method is clearly linked to the objective that the government wishes to achieve.

C. TBT 2.1

The *US – Tuna II* and *US – Clove Cigarettes* AB Reports consider whether a negative impact on conditions of competition may be explained by 'legitimate regulatory distinctions', a further step toward considering factors other than competition impacts.

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[63] This argument was made in GATT Panel Report on United States – Restrictions on Imports of Tuna *(US – Tuna)*, DS21/R – BISD 39S/155, unadopted, circulated 3 September 1991; *see also US – Taxes on Automobiles,* Panel Report, above n. 4.

[64] *See, eg, US – Malt Beverages,* above n. 42; WTO Panel Report on United States – Standards for Reformulated and Conventional Gasoline *(US – Gasoline),* WT/DS2/R, adopted 29 January 1996, paras. 6.11- 6.12.

The *US – COOL* Panel, on the other hand, focused on conditions of competition (the AB Report has not yet appeared at the time of writing).

In *US – Clove Cigarettes*, Indonesia challenged the US ban, which was based on their conclusion that the flavour of clove cigarettes encouraged more young people to take up smoking. The Panel were reluctant to import Article III's competition-based approach. Instead, they proclaimed their strategy of bearing in mind the purpose of the regulation, which was public health, and more specifically the reduction of youth smoking. With respect to the public health objective, they considered it particularly significant that both (domestic) menthol and (imported) clove cigarettes had an additive that reduces harshness and acts as a numbing agent. Therefore, they considered these products to be 'like' with respect to the relevant criterion: whether youth smokers would take to them.[65]

The Panel concluded that the US was inconsistent with respect to its policy objective of reducing youth smoking. While they banned clove cigarettes, they did not ban 'like' domestic menthol cigarettes. The Panel determined that they did not ban domestic menthols because to do so would be expensive. Therefore, they concluded that the US was imposing costs on other Members while protecting US entities from similar costs.[66]

The AB Report disagreed with the Panel's suggestion that the policy objectives of the measure should shape the interpretation of the 'like' products test. They reiterated that it was only in the marketplace that it could be determined how a measure treated 'like' products.[67]

In their critique of the Panel's approach to 'like' products, they echoed some of the *Japan – Alcoholic Beverages II* Panel's initial reasoning regarding the rejection of the aim-and-effect test. They suggested that it might be difficult to ascertain the regulatory objectives pursued, as they might be multiple, and the Panel might not be in the position to prioritize. To support this argument, they cited the fact that the US themselves had criticized the Panel for focusing on the measure's immediate objective, while disregarding its other regulatory goals.[68] They were concerned that changing the terms of the 'like' product test to include policy objectives might narrow

[65] *US – Clove Cigarettes*, Panel Report, above n. 10, at paras. 7.182, 7.208 and 7.247.
[66] Ibid at para. 7.289.
[67] Ibid, AB Report, at para. 110 – 111.
[68] Ibid at para. 114.

or alter the scope of the concept in a way that would then impact upon the 'less favourable treatment' determination.[69] Thus, along the lines of the rejection of the aim-and-effect test, this dispute provided a second clear rejection of incorporating policy objectives into the 'like' products test.

The AB noted disagreement between Indonesia and the United States in their interpretation of the 'treatment no less favourable' requirement of TBT Article 2.1. Indonesia argued that a modification of conditions of competition to the detriment of imported goods implied that a violation had occurred, while the US believed that it was additionally necessary to establish that this treatment had to do with the foreign origin of the product in dispute.[70] Thus these national positions exemplified differing interpretations of Article III(4).

The AB agreed with the US interpretation. In so doing, they took into account the fact that a technical regulation establishes distinctions between products. Thus, any differential treatment between products should not *per se* be considered less favourable treatment.[71] In sum, the AB clarified that the TBT Agreement permitted 'detrimental impact on competitive opportunities for imports that stems exclusively from legitimate regulatory distinctions'.[72]

They emphasized that legitimate regulatory distinctions must be the exclusive cause of the negative impact on competition, and that the AB must scrutinize the measure to see if it was even-handed in its application.[73] In so doing, they reviewed the US's regulatory distinctions, including reducing youth smoking, preventing a surge in hospitalization from withdrawal from menthol cigarettes, and preventing a black market. The AB agreed with the Panel that both menthol and clove cigarettes contained flavouring, so there was no legitimate reason for less favourable treatment of the 'like' imported product. They also considered that preventing hospitalization was not a compelling objective, as this was associated with nicotine withdrawal, rather than withdrawal from mint (the active ingredient in menthols).[74] On this basis, they concluded that less favourable treatment of imported 'like' products had occurred.

[69] Ibid at para.116.
[70] Ibid at para. 165.
[71] Ibid at para. 169.
[72] Ibid at para. 175.
[73] Ibid at para. 182.
[74] Ibid at para. 225.

In *US – Tuna II* the AB employed a similar approach to the 'less favourable treatment' test. The dispute concerned a US law that tuna could not be labelled dolphin safe if it were fished by encircling dolphins with purse seine nets to catch the tuna that congregated underneath, a requirement that applied specifically within the Eastern Tropical Pacific ('ETP').[75]

Mexico argued that the US should change its requirement from no encircling dolphins to 'no dolphin mortality or serious injury'.[76] They stated that Mexican fleets had made successful efforts to dramatically reduce dolphin mortality by following the procedures of an alternative international certification system.[77] Mexico also felt that the requirement was inconsistent: there were dolphins being killed by tuna fishing outside the ETP area, and the US was not strict enough in its response.[78]

The US argued that encircling dolphins in fact was responsible for their continuing deaths, and also listed other negative impacts on dolphins, such as separating mothers from their dependent calves, and reducing reproduction rates due to stress. They also pointed out that the label was voluntary; Mexican tuna that did not qualify was still sold in the US.[79] They argued that international efforts, while successful to some degree, had not been sufficient.

The AB first provided a clarification with respect to the relationship between PPMs and the TBT's Article 2.1. The AB stated that:

> *Article 2.1 should not be read … to mean that any distinctions, in particular ones that are based exclusively on particular product characteristics or on particular processes and production methods, would per se constitute "less favourable treatment" within the meaning of Article 2.1.*[80]

Thus, they underlined that PPM-based measures did not automatically constitute a violation of the TBT Agreement.

The AB made clear that a detrimental impact on imports is not sufficient to constitute less favourable treatment; it must also be established that this treatment does not stem from a legitimate regulatory distinction.[81] Their approach thus aligned with that of *US – Clove Cigarettes*. Applying this approach, they divided their analysis into two stages: first, an assessment of whether the measure modified

[75] *US – Tuna II*, Panel Report, above n. 11, at para 2.15.
[76] Ibid at para. 2.38.
[77] Ibid at paras. 4.10 – 4.16.
[78] Ibid at paras. 4.33 – 4.34.
[79] Ibid at para. 4.74.
[80] Ibid, AB Report at para. 211.
[81] Ibid at para. 216.

conditions of competition to the detriment of Mexican tuna products; second, whether this detrimental impact stemmed exclusively from a legitimate regulatory distinction.[82]

Undertaking the first stage, the AB concluded that there was a detrimental impact on Mexican tuna as the majority was caught using the 'purse seine' method prohibited in the US.[83] Following guidance from *Thailand – Cigarettes (Philippines)*, quoted above, that there should be a 'genuine relationship' between the measure and the adverse competitive impact, they stated that this should be determined by enquiring whether it was specifically the *government* intervention that determined the conditions under which the imported and domestic product competed. They concluded that, as the measure controlled access to the label, and allowed consumers to express their preference for dolphin-safe tuna, it determined the conditions of competition.[84]

The AB then considered whether this negative impact was a result of a legitimate regulatory distinction. The AB stated that the labelling provision was not even-handed: it excluded tuna caught by setting on dolphins inside the ETP, while permitting tuna caught outside of the ETP by other fishing methods, despite the fact that significant detrimental impacts upon dolphins result from the latter.[85] Thus, the AB concluded that the labelling provision did not comply with Article 2.1. Their ruling was based upon their interpretation of the consistency of the measure.

The *US – COOL* Panel Report provides an interesting counterpoint. In the dispute, Canada and Mexico, as well as a number of third parties, complained that the US's policy for country of origin labelling for a variety of products, particularly meat products, constituted *de facto* discrimination under the TBT Agreement. Their approach was based more strictly upon the effect of the measure on market competitiveness. They noted that the measure led to segregation between domestic and imported animals; while this in itself did not constitute *de facto* discrimination, segregation led to higher costs.[86] They also concluded that the measure created incentives for participants to process domestic rather than imported livestock because

[82] Ibid at para. 231.
[83] Ibid at paras. 234 – 235.
[84] Ibid, AB Report at paras. 237 – 240.
[85] Ibid at para. 298.
[86] Ibid, Panel Report at paras. 7.328, 7.372.

it would be cheaper to do so.[87] Thus, with reference to *Korea – Beef*, they concluded that the measure created a lack of competitive opportunities for imported livestock, and thus constituted less favourable treatment.[88] The policy objectives of the measure did not constitute a separate judicial consideration.

8. EU Biofuels Sustainability Criteria

Though biofuels have not been the subject of a trade dispute, there is the potential for conflict under Article III(4) or TBT 2.1. Whether these provisions, when applied, will discriminate unfairly against importers is subject to debate. There could be a dispute under the NTP if exporting countries argue sustainable and conventional biofuels are 'like', and that sustainability regulations *de facto* discriminate against imports.

As the disputes in this chapter demonstrate, adjudicating a violation requires analysing its national implementation. The detailed analysis of past disputes that this chapter undertakes is based upon dispute settlement bodies' reports which synthesize the information submitted by the parties in dispute. In examining tthe NTP-compatibility of biofuels sustainability criteria, the following analysis focuses on the EU criteria themselves, rather than their national implementation.

A. The role of evidence and the 'like' products test

The next chapter focuses on the 'like' products test and biofuels sustainability criteria, so this section will be brief. The AB has consistently rejected the consideration of policy objectives when determining if products are 'like'. While this rejection forms a focus of the next chapter, this section will focus on the role of evidence in the 'like' products test. In an 'EU – Biofuels' dispute under the NTP, the dispute settlement bodies would first need to determine if the products in dispute are 'like'.

In general terms, it can be said that the lack of reliance on evidence has been used to strengthen, rather than check, the NTP; this could certainly be relevant in a dispute on biofuels sustainability criteria. If there were a negative competitive impact on imported biofuels because consumers did not like the fact that they were unsustainable, the AB might discount this, in keeping with previous practice. The

[87] Ibid at para. 7.357.
[88] Ibid at para. 7.373 – 7.374.

argument would be that the measure in dispute was in fact shaping consumer preference.

The dynamics of this regulation differ from those in *Korea – Alcoholic Beverages*, for example, in which the AB suggested that consumers had yet to develop a taste for an imported alcoholic beverage as they had not been exposed to it enough. For this reason, it seems unlikely that the AB would cite the possibility of future competition, as they did in that dispute, to prove that domestic and imported biofuels were competitive.

However, it is possible that the AB might take into account an argument that there was latent demand. For example, perhaps consumers would prefer to buy imported biofuels that did not comply with the criteria if they were cheaper. They might also incorporate evidence from similar markets to demonstrate that consumers in these countries purchased conventional biofuels without reservation. These are all speculative possibilities, but they illustrate how these approaches would make it more likely that the products in dispute would be considered 'like', even if consumers boycotted imported conventional biofuels.

Measuring consumer preference will depend on the availability of imported versus domestic products, and how this distinction mapped onto the division between sustainable and non-sustainable biofuels. These supply chain issues also form a focus of the next chapter, so they will not be addressed at length here.

B. Less favourable treatment

i. The role of evidence

While domestic biodiesels still account for the majority of EU biofuels consumption, imports have been on the rise at the expense of domestic production.[89] Yet, regardless of current import levels or trends, under the established approach, simply identifying a discriminatory structure and application would be sufficient to establish a violation. *US – Tuna II* provides a useful example of the spectrum of interpretation of this issue even under the established approach. As previously cited, in this dispute only 1 per cent of the imports in the responding country, the US, came from Mexico, the complaining country.

[89] *See, eg,* M Hogan and I Sekularac, 'Analysis: EU Biodiesel plans fear closure as imports surge', *Reuters*, 15 November 2011; ''EU likely to curb Indonesian palm biofuels imports', *Business Reporter*, 27 November 2011.

The Panel and the AB interpreted this differently. The Panel stated that there was no way of knowing whether the low level of imports was due to the behaviour of the market irrespective of the measure. This is an extremely deferent approach, in which the Panel actually disregarded evidence of low import volumes. They thus gave the US the benefit of the doubt; for this and other reasons, they finally determined that the measure did not violate TBT 2.1.

The AB reaffirmed the importance of examining the application of the measure itself, rather than trade volumes. They further clarified that their finding that the measure was protectionist would stand even if Mexican products 'might not achieve a wide penetration of the US market in the absence of the measure at issue due to consumer objections to the method of setting on dolphins'.[90] The AB jettisoned consumer's potential perceptions of morality even if they impacted upon the levels of competition between the products in dispute. They emphasized the application of the measure over trade volumes. This suggests that, even if aversion to purse seine fishing meant that tuna thus caught would never be competitive, the measure would still violate the NTP.

These interpretations would be applicable to an 'EU – Biofuels' dispute. If trade volumes of imported biofuels were low, the dispute settlement bodies would face a similar question: do these figures reflect market forces, or are they a result of the measure at issue? Following the Panel's approach, they would be more likely to conclude that the measure was not protectionist. Following the AB's rationale, however, the application of the measure and whether it *de facto* discriminated against imported biofuels would be the main consideration, even if consumers would not purchase imported 'unsustainable' biofuels if the measure were removed.

ii. Conditions of competition versus legitimate policy distinctions

The AB's interpretation of whether the EU's regulatory distinction is legitimate will also be influential in their ruling. For example, the EU's identification of prohibited land areas for growing biofuels may have a negative impact on conditions of competition for certain exporters. This might automatically indicate that the measure is protectionist. Yet the AB might also focus on whether the application of the measure is even-handed and based upon the legitimate regulatory distinction between conventional biofuels and those produced with the goals of biodiversity preservation

[90] *US – Tuna II*, AB Report, above n. 11, at para. 239.

and emissions reduction.[91] If so, the regulation would not have to do with the foreign origin of the biofuels as such.

As TBT disputes demonstrate, adding a separate consideration of whether the measure is based upon a legitimate policy distinction does not guarantee that it will be compliant. In *US – Tuna II,* Mexico questioned some inconsistencies, for example, more stringent requirements inside than outside the ETP. The AB agreed with Mexico that these inconsistencies suggested that the measure was discriminatory rather than reflecting a legitimate regulatory distinction. Similarly, a complaining country might raise inconsistencies in the RED, such as methodological flaws in calculating various emissions savings or establishing land-use categories.

Nonetheless, this interpretation is clearly more deferent to the regulating country. The fact that the EU has chosen to regulate biofuels products differently based upon land-use impacts suggests that they *do* see a legitimate regulatory distinction. As one author has written, 'Where WTO dispute resolution panels review and reject domestic regulatory categories, they sit in judgment of the rationality of those categories and of the regulation itself'.[92] Affirming that an NPR PPM, in this case the land-use criteria, can be the basis for legitimate regulatory distinction also implicitly affirms that this category of regulation is legal and valid.

It is interesting to note that there are no criteria to determine which approach the AB adopts. One hypothesis, though it is speculative, is that the approach reflects in part the perceived importance of the regulatory goals that the measure pursues, an implicit balancing process. If this is the case, the AB's interpretation of the NTP would also suggest something about the importance they gave to biodiversity conservation and emissions reduction, when weighed against the trade impacts. This hypothesis is further discussed in the conclusion.

9. Conclusion

A central and oft-analysed issue in WTO law has to do with the balance between regulatory autonomy and trade commitments under the NTP. This analysis suggests

[91] European Council Directive 2009/28/EC of the European Parliament and of the Council on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC' OJ [2009] L140/16 ('RED'), at Preamble paras. 69 – 70.
[92] J Trachtman, 'Trade and…Problems: Problems, Cost-Benefit Analysis, and Subsidiarity' (1998) 9 *European Journal of International Law,* 66.

that there are elements of the EU's regulation that may not conform with the NTP. Determining conformity would depend in part on the AB's interpretation of the two issues that form the focus of this chapter: the influence of evidence and whether the AB considered that legitimate regulatory distinctions might account for a negative impact on conditions of competition. The jurisprudence demonstrates that there is room for interpretation on a dispute-by-dispute basis, particularly with respect to the latter issue.

The theme that connects both of these topics is the importance of interpretation. This is significant with respect to the AB's emphasis on the existence and nature of competitive relationships between products in dispute as the key factor in assessing compliance with the NTP. Assessing competitiveness may seem to imply undertaking quantitative analyses of market flows. In fact this has been decisively rejected. In the 'like' and DCS products test, the AB has rejected quantitative assessment of existing market relationships in favour of an approach that is more speculative. When determining whether a measure is discriminatory, the AB has focused on its applications, rather than evidence of trade volumes.

This has implications for the balance between national sovereignty and WTO law. Adjudicating the NTP solely based upon market evidence of competition would not be desirable, as it would result in automatic deregulation with respect to any measure which had a negative impact upon imported products. Yet this chapter pointed out instances in which the dismissal of evidence, and use of more speculative evidence, were employed to find measures not in compliance. The rationale has been that relying on evidence will weaken the NTP's influence, as the principle evaluates the application of a measure rather than its effects.

The nature of the AB's interpretation is also significant with respect to the second theme of this chapter. This chapter outlined two approaches. Under the first, a finding of violation is based upon assessing the presence of a negative impact on conditions of competition to the detriment of imported products (though this may require interpreting the nature of the competitive relationships). Under the second, the AB also takes into account whether this negative impact might be explained by something other than the products' foreign origin, or based upon 'legitimate regulatory distinctions'. Considering whether regulatory distinctions are legitimate necessitates another layer of interpretation. In this case, this is a more deferent

approach, as it allows the possibility that even a measure with a negative impact on competition for imported products might not violate the NTP.

This approach can be distinguished from the type of reasoning that the AB undertakes in GATT Article XX or TBT 2.2. The AB is not linking their interpretation to the policy objectives at stake, as they would under these Articles, but simply assessing whether it seems likely that the measure is discriminatory based upon its structure and application. In this sense, it remains a neutral approach with respect to the importance of the regulatory values at stake. However, the concept of 'legitimate' policy distinctions, as stated under TBT 2.1 jurisprudence, suggests a bit of a gray area. It may be difficult to establish that a policy distinction is 'legitimate' without any reflection on the importance of the value at stake.

The AB has not explained the reasoning behind adopting this more deferent approach in some disputes and not others. One possibility is that this determination is influenced by the importance of the values at stake, an implicit balancing process. For example, the regulatory objectives of two of the recent TBT disputes had clear public policy implications: preventing youth smoking and eliminating dolphin bycatch in tuna fishing. On the other hand, the *US – COOL* dispute focused on country of origin labelling for meat products. Perhaps the compelling public policy implications of the former disputes might go some of the way toward explaining why the AB considered the possibility of 'legitimate policy objectives' while the Panel in *US – COOL* did not. This might also contribute to the fact that the AB has taken a more conservative approach to rejecting 'subjective' regulatory intent in disputes under Article III(2), which dealt with taxation measures that did not have such controversial implications. This possibility is also significant with respect to biofuels sustainability criteria. It raises the question of whether sustainability is as compelling as preventing youth smoking or dolphin safety. The suggestion that an implicit balancing process may inform the NTP in some disputes also forms a focus of the next chapter.

Chapter 6

Biofuels sustainability, consumer preference and the National Treatment Principle

1. Introduction

A. Consumer preferences and the National Treatment Principle

This chapter focuses on how consumer preferences have been interpreted and applied in deliberation of WTO disputes under the National Treatment Principle ('NTP'). The two central issues of the previous chapter also define this analysis. The first is the role of market evidence, and the implications of an evidence-based versus interpretive approach for the balance between trade liberalization and deference to national policy goals. In the 'like' products test, in particular, the previous chapter argued that the AB's approach of looking beyond evidence from existing markets to establish product competitiveness has increased the jurisdiction of the NTP. This suggests that an evidence-based approach, namely measuring consumer behaviour to ascertain product competitiveness, is advisable to tilt the balance back toward national regulatory autonomy. Taking this suggestion as a starting point for further analysis, this chapter examines methodological questions of how these behaviours are measured, and in which circumstances they should be dismissed or interpreted.

The second issue is whether, and how, national policy objectives inform the adjudication of whether products are 'like'. The previous chapter introduced the suggestion that the level of deference that the AB showed toward national policy objectives may have been influenced by the importance of the value at stake. The AB has repeatedly affirmed that the 'like' products test is the most market-based aspect of the NTP. However, this chapter suggests that the importance of the objectives that a measure pursues may influence this determination, when it is too difficult to assess consumer preference for an objective, competition-based argument.

The entry point for this analysis is the concept of 'like' products. This concept, which recurs throughout the WTO Agreements, is an influential aspect of WTO law

in general.[1] The consideration of what constitutes 'like' products has differed both between, and within, relevant Articles, and the slightly varied phrasing of these Articles also influences their interpretation. However, the basic concept is that less favourable treatment should not be awarded to 'like' products, regardless of their origin.

This chapter focuses on the NTP as it is applied in GATT Article III ('Article III') and TBT Article 2.1 ('TBT 2.1'), due to their particular applicability to EU biofuels sustainability criteria. The full articles and a brief overview of their interpretation is provided in the previous chapter, in Sections 2 and 3. By way of review, the NTP generally stipulates that, with regard to regulations, imported products must be treated the same way as domestic products.

The majority of Article III disputes fall under either Article III(2), which specifically addresses taxation, or Article III(4), which addresses other forms of regulation. The first step in determining whether a national tax or regulation discriminates against imported products, thus constituting an Article III violation, is to determine whether two products, domestic (favoured) and imported (unfavoured) are 'like'. The TBT Agreement contains a National Treatment provision similar to Article III(4), whose employment of the term 'like' is very similar to that of Article III(4). If they are 'like', the dispute settlement bodies, which consist of the Panel and the Appellate Body ('AB'), then consider whether the measure is discriminatory. The interpretation of the term 'like' thus outlines the boundary of the NTP's jurisdiction.

When establishing whether products are 'like', consumer preferences are an important consideration, for two reasons. First, as will be further discussed, jurisprudence on the NTP demonstrates that 'likeness' is determined in the marketplace, based upon consumers' perceptions of whether goods are in a competitive relationship with one another. The Appellate Body ('AB') has repeatedly affirmed that 'likeness' is based upon competition; it should not include an evaluation of the policy objectives that led a country to distinguish these products.

Second, 'consumer tastes and habits' forms one of four traditional criteria, drawn from a 1970 GATT Border Tax Adjustment Working Party report ('BTA criteria'), utilized to determine whether products are 'like'. These include: 'the

[1] WM Choi, '*Like Products' in International Trade Law: Towards a Consistent GATT/WTO Jurisprudence* (Oxford: Oxford University Press, 2003).

product's end-uses in a given market; *consumers' tastes and habits, which change from country to country*; the product's properties, nature and quality' [Emphasis added] (GATT, 1970: 3).[2] This chapter uses the term 'consumer preferences,' rather than simply the GATT criterion's 'consumer tastes and habits', to avoid confusion, as the influence of consumer preferences goes beyond the application of this criterion, and includes a broader consideration of product competitiveness.

The BTA criteria are meant to define what 'like' means, and product competitiveness is an essential component of 'likeness.' However, it has not been clearly established that the BTA criteria are intended to somehow add up to a definition of competitiveness. The two enquiries seem to operate in parallel, sometimes overlapping.[3] Overall, the approach varies widely, and there is not much consistency from dispute to dispute, nor generalized guidance.

In the GATT Agreement, as well as the other WTO Agreements, there are very few explicit mentions of consumers, and none in the National Treatment Principle itself.[4] Though it is not a mandatory aspect of Article III deliberation, of the 20 disputes that have fallen under Article III since the WTO's formation in 1995, fourteen cite the BTA criteria,[5] and more than half utilize consumer preferences in coming to their conclusions, often through analysis of whether products are competitive with one another.[6] While there are too few TBT disputes to evaluate general trends, the role of consumer preferences in these disputes will also be examined in this chapter.

One author has suggested that consumer preferences could play a special role in WTO disputes that have to do with public policy regulations, specifically with

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[2] In a later Article III dispute, the Panel amended the list to include the customs classification, or HS Code, of the product.

[3] In some disputes, for example *Japan – Film*, the *Chile – Alcoholic Beverages* Panel Report, and *EC – Bananas III*, discussions of competitiveness, including reference to consumers, occur independent of any citation of the BTA criterion.

[4] One mention of consumers occurs in GATT Article IX and XI; WTO GATS Agreement and TRIPS Agreement.

[5] *See: US – Gasoline, Japan – Alcoholic Beverages II, Canada – Periodicals, Indonesia – Autos, Dominican Republic – Cigarettes, Mexico – Soft Drinks, Korea – Alcoholic Beverages, EC – Asbestos, Canada – Autos, Korea – Beef, Canada – Wheat Exports, EC – Commercial Vessels, US – FSC, Brazil – Tyres; see* Bibliography for complete references.

[6] *See: Japan – Alcoholic Beverages II, Canada – Periodicals, Indonesia – Autos, Dominican Republic – Cigarettes, Mexico – Soft Drinks, Korea – Alcoholic Beverages, Chile – Alcoholic Beverages, EC – Bananas III, Japan – Film, EC – Asbestos, Canada – Autos, Korea – Beef, Canada – Wheat Exports, Brazil – Tyres; see* Bibliography for complete references.

regard to emerging regulations that respond to climate change.[7] This is because products otherwise 'like' with regard to the BTA criteria might be different to consumers. For example, consumers might prefer goods that have been produced with low carbon emissions, and see them as different from conventional goods. In much the same way, consumer preferences would also be relevant in a potential dispute on biofuels sustainability criteria. The NTP is fundamentally concerned with market relationships, rather than the physical characteristics of products in dispute. Consumers may see physically similar goods as non-competitive; conversely, they may consider physically distinct goods as interchangeable and competitive.[8] Thus, though measuring consumer preference necessitates market analysis, which makes it more difficult to capture than more self-evident BTA criteria, it promises to provide a more accurate basis for assessing whether products are 'like'.

This chapter investigates the potential importance of consumer preference in a dispute on biofuels sustainability criteria. In spite of ongoing controversy about the treatment of environmental regulation in the WTO, and scrutiny of the Appellate Body ('AB') approach to such disputes, not much targeted analysis has been undertaken of how consumer preferences have influenced past disputes on public policy regulations, and how they should be interpreted in the future. Indeed, much of the existing literature has analysed, from an economic perspective, the best methodologies for determining 'like' products.[9]

For the reasons stated above, consumer preference (as it shapes product competitiveness) plays a primary role in assessing whether products are 'like'. However, an economic approach to 'like' products has faced particular challenges when confronted by public policy regulations. This chapter will examine these challenges (from a legal, rather than economic, perspective) by contrasting the economic approach taken in *Japan – Alcoholic Beverages II* with the approach taken in *EC – Asbestos*, a dispute that raised more difficult ethical questions. It will also

[7] E Vranes, 'Climate Labelling and the WTO: The 2010 EU Ecolabelling Programme as a Test Case Under WTO Law' in C Herrman and J Terhechte (eds), *European Yearbook of International Economic Law* (9 March 2010) 11.
[8] E Vranes, *Trade and the Environment: Fundamental Issues in International Law, WTO Law, and Legal Theory* (Oxford: Oxford University Press, 2009) 194.
[9] *See, eg,* G Berg, 'An economic interpretation of 'like-product'' (1996), 30(2) *Journal of World Trade*, 195-209; Choi, above n. 1.

analyse the approach of *US – Tuna II*[10] which raises important questions about the applicability of the concept to the relevant product category.

B. Approaches to consumer preferences

This chapter focuses primarily on two disputes: *Japan – Alcoholic Beverages II*[11] and *EC – Asbestos*.[12] Others have also included substantial analysis of consumer preferences. However, the selected disputes, as well as providing important benchmarks in the jurisprudence, also well illustrate a spectrum of interpretive possibility.

In *Japan – Alcoholic Beverages II* the dispute settlement bodies utilized what this chapter calls an objective approach to consumer preference.[13] This approach emphasized the importance of 'objective' BTA criteria, such as how products appeared ('the product's properties, nature and quality') and were used ('the product's end-uses in a given market'), as opposed to 'subjective' consumer preferences, such as traditional patterns of consumption.

Further, the dispute emphasized the importance of a competitive market relationship between products, from a consumer perspective, as a way to determine their 'likeness.'[14] To establish competitiveness, the objective analysis of consumer preferences was approached economically. For example, the parties utilized elasticity of substitution studies to measure whether consumers would switch to one disputed alcoholic beverage if the price of the other rose. As noted in the previous chapter, this

[10] WTO Panel Report on United States – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products *(US – Tuna II)*, WT/DS381/R, adopted 15 September 2011, and Appellate Body Report, WT/DS381/AB/R, adopted 16 May 2012.
[11] WTO Panel Report, Japan – Taxes on Alcoholic Beverages *(Japan – Alcoholic Beverages II)*, WT/DS8/R; WT/DS10/R; WT/DS11/R, adopted 11 July 1996; and Appellate Body Report, WT/DS8/AB/R; WT/DS10/AB/R; WT/DS11/AB/R, adopted 4 October 1996.
[12] WTO Panel Report, European Communities – Measures Affecting Asbestos and Asbestos-Containing Products *(EC – Asbestos)*, WT/DS135/R, adopted 18 September 2000; and Appellate Body Report, WT/DS135/AB/R, adopted 12 March 2001.
[13] This term is borrowed from another analysis, also referenced later, which characterizes the dispute settlement bodies' general approach to *Japan – Alcoholic Beverages II* as 'objective': H Horn and J Weiler, 'European Communities – Measures Affecting Asbestos and Asbestos Containing Products' in H Horn (ed), *The American Law Institute Reporters' Studies on WTO Case Law* (Cambridge: Cambridge University Press, 2003) 27-52.
[14] M Bronckers and N McNelis, 'Rethinking the "Like Product" Definition in GATT 1994: Anti-Dumping and Environmental Protection' in T Cottier, et al. (eds), *The World Trade Forum*, Vol. 2. (Ann Arbor: University of Michigan Press, 2000) 345, 347.

approach to evidence was subsequently dismissed in *Korea – Alcoholic Beverages*.[15] In this dispute, the AB emphasized the 'objectivity' of their interpretation, as opposed to subjective arguments made by the government in dispute.[16] However, they also rejected a sole reliance on evidence. For the purposes of this chapter, 'objective' will refer to an evidence-based approach.

In *EC – Asbestos,* the dispute settlement bodies faced a very different set of circumstances from either of these disputes. None of the disputing parties had submitted any evidence, market-based or otherwise, about consumer preferences. In part, this reflected the fact that, rather than many individuals, asbestos was purchased by few, industrial consumers, which made their preferences more difficult to quantify. Further, the measure in question was a public health regulation. The Panel applied the same 'objective' approach, concluding that consumer preference, as it could not be measured, was not a relevant consideration.

The AB disagreed, asserting that consumers would *not* prefer asbestos. This conclusion was not based in evidence, but common sense, grounded in international standards. Though their reasoning represented a departure from the objective approach described above, they disingenuously presented it as objective. They did so by basing their argument on likely *quantitative* impacts in the market (a negative competition effect), and the objective BTA criterion of *physical characteristics* of the products in question, which then affected consumer preferences.

EC – Asbestos brings up a fundamental question: should this approach be generalized, so that the AB can interpret what constitutes consumer preference when dealing with normative regulations that limit, or eliminate, the ability of consumers to choose, and thus have their preferences measured? If this approach is not permissible, should consumer preferences just be disregarded, despite their relevance to such an important public policy decision?

2. Preliminary analysis

[15] WTO Panel Report, Korea – Taxes on Alcoholic Beverages *(Korea – Alcoholic Beverages)*, WT/DS75/R; WT/DS84/R, adopted 17 September 1998, and Appellate Body Report, WT/DS75/AB/R; WT/DS84/AB/R, adopted 18 January 1999.
[16] The previous chapter's section 6(a) addresses this comprehensively.

Considering the different strategies employed in these two disputes, it is possible to simply assert that the interpretation of consumer preferences has been inconsistent, and even illogical. However, it is perhaps more useful to examine the causes behind these discrepancies, and what they reveal about the challenges of capturing consumer preferences more generally. In *EC – Asbestos*, the AB evaluated consumer preferences, and product 'likeness', without reference to *evidence* of competitiveness between the products. For this to occur, the public policy at issue needed to represent a fairly unambiguous consensual societal norm, such as human health, as well as a situation where objective evidence about consumer preferences was not available, or difficult to obtain. In such a situation, it became politically difficult to keep consumer preference, and the associated public policy goal of supporting human health, out of the NTP, due to the potential for public backlash.

The dispute settlement bodies' approach to consumer preferences reflects oft-discussed strategies of NTP interpretation employed more broadly in each dispute. Thus, considering the influence of consumer preferences involves grappling with some of the same controversies that they raised. Principal among these is whether, under the NTP, product 'likeness' is determined solely by product competitiveness. On the other hand, can public policy goals that inform how the product is regulated make one product unlike another? In other words, to what extent should the types of concerns addressed under GATT Article XX ('Article XX') or TBT Article 2.2 ('TBT 2.2') be considered within the 'likeness' test of the NTP?

In this sense, consumer preferences raise some of the same questions as the 'aim-and-effect' test, an approach to interpreting product 'likeness' whose rejection forms an interrelated theme of the disputes in question. This approach was rejected, in part because it unduly empowered a government's unprovable claim: that its *aim* in setting a regulation was not to discriminate. Consumer preferences would seem not to have much in common with this approach, as they represent the collective behaviours of individuals, rather than the discretion of a single government. Also, consumer preferences are an objectively measured entity, rather than an unprovable claim.

Or are they? In *EC – Asbestos*, consumer preferences had two important features in common with 'aim-and-effect'. First, they provided a tool (though used rather disingenuously) for broadening the scope of what constituted 'like' products, to include public policy considerations. Second, they stood in for a discretionary

approach to determining the validity of a regulation, though employed by the AB, rather than a national government. There is a common theme uniting this approach with the previous chapters: the conceptual structure of balancing. This chapter argues that, in *EC – Asbestos*, the AB took the importance of the common value at stake, in this case human health, into account when evaluating the measure's compliance with Article III. The dispute demonstrates the difficulty of excluding factors beyond quantifiable market impacts when considering whether a measure violates the NTP.

Perhaps one reason this balancing exercise took place through the consideration of consumer preferences is that, while 'aim and effect' has been rejected, consumer preferences still play an important role in dispute deliberation. Future public policy disputes that fall under the NTP will likely provoke the same problems and concerns, even if not so strongly as in *EC – Asbestos*. The potential for correlation between products with import bans or restrictions, products that generate strong preferences from consumers, and products that come under scrutiny for violating WTO rules such as the NTP, suggests that the measurement of consumer preferences forms an important area of enquiry.

The chapter finally considers the example of a hypothetical dispute on EU sustainability standards for biofuels. As in *EC – Asbestos*, the biofuels supply chain would likely make it difficult to quantify consumer preferences. To complicate things further, a common sense determination is probably more difficult than in the example of carcinogenic asbestos. Thus, an approach based on measurement might be difficult; an approach based on interpretation would leave a huge amount of discretion to the AB, to decide the importance of sustainability to consumers. 'EU – Biofuels' is useful for illustrating the difficulties that arise regarding consumer preferences in public policy disputes, when 'common sense' becomes less common.

In this context, it is also important to consider recent jurisprudence under the TBT Agreement, from the Panel Report in *US – Tuna II*. In the report, the Panel dismissed consumer preference because some imported products complied with the specification of the regulation, ie, dolphin-safeness. If this same reasoning were applied to sustainable biofuels, consumer preference would also be dismissed. Thus, the dispute brings up important questions about the categorization of imported versus domestic products and how consumer preference maps onto this distinction.

3. Case study 1: *Japan – Alcoholic Beverages II*

A. The dispute

In 1996, the newly-formed WTO faced its first Article III dispute, *Japan – Alcoholic Beverages II,* which followed from a 1987 GATT dispute, and had many similar elements.[17] In the GATT dispute, the EEC argued that, although Japan's taxation policy with regard to alcoholic beverages was origin-neutral, it violated Article III(2). They claimed that the policy was both protective and discriminatory, as it levied higher taxes on imported 'like' products, such as whisky and vodka, than domestic products, such as Japanese shochu. Japan argued that its *intent* was non-discriminatory. Rather, liquor tax was levied according to the tax-bearing ability. Japan also claimed that traditional shochu was not 'like' vodka and other competitors. The Panel dismissed Japan's argument about the non-discriminatory intent of its measure, concluding that a wide range of the beverages in question were 'like,' and that the taxation system discriminated against imported alcoholic beverages.

Japan – Alcoholic Beverages II, in 1996, followed from the GATT *Japan – Alcoholic Beverages*. The US, EC and Canada charged that there was still *de facto* discrimination against imported alcohol under Article III(2), even after the 1987 GATT ruling. Japan had responded to the 1987 dispute by changing its laws, but put in place an excise tax reduction for small producers of shochu. Also, Japan continued to tax 'white' and 'brown' liquor differently, which the complainants charged was a discriminatory practice; in particular, they argued that (brown) whisky was 'directly competitive or substitutable' ('DCS') to (white) Japanese shochu.[18]

One of the core debates of both disputes concerned consumer preferences: were differences consumers perceived between shochu, Japan's traditional alcoholic beverage, and imported alcoholic spirits, significant enough to determine that the products were not 'like' or 'DCS'? The dispute settlement bodies' response to this question demonstrated what this chapter is calling the 'objective' approach to consumer preferences.

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[17] GATT Panel Report on Japan – Customs Duties, Taxes and Labeling Practices on Imported Wines and Alcoholic Beverages *(Japan – Alcoholic Beverages)*, L/6216, BISD 34S/83, adopted 13 October 1987.

[18] Panel Report, *Japan – Alcoholic Beverages II,* above n. 11, at paras. 3.1 – 3.4.

B. The objective approach to consumer preferences

This approach explicitly embraced aspects of consumer preferences that were observable, measurable and quantifiable. The 1987 GATT Panel Report illustrated some components of the objective approach. In coming to its decision, the 1996 Panel Report quoted this section of the 1987 Report:

> *…even though the Panel was of the view that the 'likeness' of products must be examined taking into account not only* ***objective*** *criteria (such as composition and manufacturing processes of products) but also the more* ***subjective*** *consumers' viewpoint (such as consumption and use by consumers) the Panel agreed…that Japanese shochu (Group A) and vodka could be considered as 'like' products in terms of Article III:2 because they were both white/clean spirits, made of similar raw materials, and their end-uses were virtually identical.*[19] [Emphasis added]

The Panel established a hierarchy of value between subjective and objective components of the 'like' products determination. They asserted that physical characteristics (which can be observed), and product end-uses (which examine not what consumers feel about a product, but what they can do with it) were more decisive BTA criteria than 'subjective consumers' viewpoint'. This paragraph suggested that these, here defined as 'consumption and use by consumers,' were not influential at all. (In *EC – Asbestos* we will see that this hierarchy was still in operation, but in a more nested way: consumer preferences were made 'objective' by being measured *using* this 'objective' BTA criteria.)

In another section quoted by the 1996 Report, the 1987 Panel affirmed that since, as 'the aim of Article III:2…could not be achieved if differential taxes could be used to crystallize consumer preference for traditional domestic products, the Panel found that the traditional Japanese consumer habits with regard to shochu provided no reason for not considering vodka to be a 'like' product.'[20] In other words, taxation measures should not interfere with consumer preferences, whose basis should be the free market, rather than the influence of government taxation. The final aspect of the 'objective' approach was the quantification of consumer preferences, to establish the market competitiveness of products in dispute.

C. The rejection of 'aim and effect'

[19] Ibid at para. 5.7.
[20] Ibid.

By examining the GATT Report, we can deduce that 'subjective consumers' viewpoints' referred to two of Japan's arguments: first, shochu was a traditional beverage and thus consumers perceived it differently. Second, consumers perceived imported alcoholic beverages as luxury products.[21] Japan called upon this second argument to justify its *intent*, which, it stated, was not to discriminate against imports, but rather to tax based upon tax-bearing ability.[22]

Japan presented similar arguments on both points in 1996, arguing that the products were differentiated by the ways in which they were consumed. For example, shochu was drunk before dinner; vodka after dinner. Many shochu drinkers added hot water to the drink, which they did not do to other spirits.[23] These differences resulted from the fact that shochu was a traditional beverage, and the others were not. Further, Japan claimed that its taxation system was based upon the principle of 'horizontal equity,' so that tax/price ratios were consistent between all alcoholic beverages.[24] In other words, wealthier consumers' preference for luxury imported alcohol justified the tax differential.

Japan argued that exporters and distributors exploited this perception, to keep their prices high. Thus, it would be impossible for shochu manufacturers to raise their prices so that they competed with imported goods, because consumers perceived shochu as a less expensive product.

In their view, Japan was not distorting consumer perceptions by levying a higher tax on whisky, nor were they making it less likely that consumers would buy whisky. Instead, they were acting in keeping with consumer perceptions. Japan argued that it would be impossible for shochu manufacturers to raise their prices so that they competed with imported goods, because consumers perceived shochu as a less expensive product. On the other hand, Japan had not included such reasoning when it initially drafted the policy; thus the Panel considered it to be an *ex post facto* rationalization.[25]

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[21] See *Japan – Alcoholic Beverages* GATT report, above n. 17: Paragraph 3.1 (b) explains the tax system; (f) describes consumer perceptions of whisky as a 'luxury good'.
[22] The Panel rejected Japan's approach to taxation, because it rested on 'necessarily *subjective* assumptions about future competition and inevitably uncertain consumer responses (GATT Report 5.13). [Emphasis added] The implication: as goods become globalized, familiarity increases, and consumers may become more comfortable with what they previously saw as luxury goods.
[23] Panel Report, *Japan – Alcoholic Beverages II,* above n. 11, at para. 4.54.
[24] Ibid at para. 4.19, 4.71.
[25] Ibid at para. 6.25.

However, the Panel agreed with the EC that the 'use of product and tax differentiations with the view of maintaining or promoting certain production and consumption patterns could easily distort price-competition among like or directly competitive products by creating price differences…which would not exist in case of non-discriminatory internal taxation consistent with Article III'.[26] This suggests that the causal relationship goes the other way from what Japan is submitting. Consumer perceptions are not driving the tax differential; rather, the government taxation policy is driving consumer tastes and habits. They noted that the concept of 'taxation according to tax-bearing ability of prospective consumers' of a product did not offer an objective criterion because it relied on necessarily subjective assumptions about future competition and inevitably uncertain consumer responses.' It was these government measures that might shape consumer behavior, and this should be avoided, as it would distort the competitiveness of the products.

Critical analyses have characterized the dispute settlement bodies' approach to *Japan – Alcoholic Beverages II* as 'objective',[27] 'formalist'[28] or 'end-use'[29]. Though these analyses differ, they all note that the dispute settlement bodies dismissed not only Japan's argument that its intent was non-discriminatory, but also the justification of a measure based on intent: the 'aim-and-effect' test. This dismissal became a consistent strategy.

Rejecting the 'aim-and-effect' test implies that extra-market issues will be considered as exceptions, rather than being a part of the initial determination of whether products are 'like.' This rejection echoed the 1987 GATT Panel's assertion that taxation should not crystallize consumer preferences. The Panel affirmed the market basis of the Article III 'like' products determination.

In their dismissal of aim and effect, the dispute settlement bodies argued that Japan was utilizing subjective arguments, such as analysis of traditional patterns of consumption, to support an unprovable claim of its 'intent'. Japan had explained its 'aim', and justified this aim as non-discriminatory, with reference to its analysis of consumer preferences. As discussed in the previous chapter, the dispute settlement

[26] Ibid at 29.
[27] Horn and Weiler, above n. 13, at 31.
[28] MJ Trebilcock and R Howse, *The Regulation of International Trade, 3rd Edition* (Abingdon: Routledge, 2005) 90.
[29] Choi, above n. 1, at 21.

bodies equated 'aim' with a *subjective* approach to consumer preferences, and the problem of subjectivity in general: how can you prove an 'aim'?

D. An econometric approach

Thus far, this analysis has focused on the criteria for determining consumer preferences as part of the consideration of 'like' products, and the rejection of aim and effect in this context. On this topic, the Panel suggested one principal danger of a subjective approach to consumer preferences: a government might use factors such as traditional patterns of consumption, to support an unprovable claim of its intent. However, we have not discussed the efficacy of its alternative: a proof based, objective approach.

A positive 'objective' approach to consumer preferences is best demonstrated in the dispute settlement bodies' examination of 'directly competitive or substitutable' products. After determining that vodka and shochu were 'like', they turned their attention to the remaining alcoholic beverages in dispute, and whether they fit into this broader category of comparison. The AB interpreted 'like products' in the first sentence as being defined narrowly, while DCS products are defined more broadly.

They stated that both 'like' and also DCS were relative concepts, whose precise interpretation should be determined on a case-by-case basis.[30] However, *Japan – Alcoholic Beverages II* is noteworthy for having developed perhaps the most econometric approach of any Article III dispute.[31] The Panel Report stated that '…in the Panel's view, the wording makes it clear that the appropriate test to define whether two products are 'like' or 'directly competitive or substitutable products' is the marketplace. The Panel recalled…the words used in the Interpretative Note ad Article III, paragraph 2, namely 'where competition exists': competition exists by definition in markets.'[32] The AB broadly agreed with this interpretation.[33]

The dispute settlement bodies used econometric methods to measure competition. The Panel asserted the importance of elasticity of substitution in

[30] *Japan – Alcoholic Beverages II,* AB Report, above n. 11, at H:1(a) – H:2(a).
[31] H Horn and P Mavroidis, 'Still Hazy after All These Years: The Interpretation of National Treatment in the GATT/WTO Case-law on Tax Discrimination' (2004) 15 *European Journal of International Law* 39, 62.
[32] *Japan – Alcoholic Beverages II,* Panel Report, above n. 11, at para. 6.22.
[33] Ibid, AB Report at 25.

determining whether the alcoholic beverages were 'directly competitive or substitutable'. The AB quoted the Panel:

> *…In the Panel's view, the decisive criterion in order to determine whether two products are directly competitive or substitutable is whether they have common end-uses, inter alia, as shown by elasticity of substitution.*[34]

The AB indicated that they agreed with this interpretation.

One of the main products in dispute was whisky. Japan used elasticity of substitution studies to argue that an increase in the price of shochu would not cause significant numbers of consumers to switch to whisky, or vice-versa. Japan cited a study conducted by its Institute for Social Studies, which found that, in either case, only 10 per cent of consumers would switch. Also, the study found no significant impact on whisky consumption based on the price of shochu, or vice versa.[35] The complainants found fault with Japan's study, pointing out procedural errors, such as the way that the time-series model was calculated, and the need for more variables which might alter consumer behaviour. They introduced separate surveys, which indicated that there *had* been a negative competitiveness effect of high taxes of whisky, as compared with shochu.[36]

The Panel had to interpret these competing claims. In the end, they rejected Japan's 10 per cent figure, as it was obtained in the context of the current pricing regime, the subject of dispute. Here, a tax seen as distorting the market was cause to invalidate Japan's evidence regarding consumer preferences. This rationale recalls the GATT *Japan – Alcoholic Beverages II* Panel Report statement, that a tax measure should not *crystallize* consumer preferences. The Panel then stated that, even so, 10 per cent elasticity *was* sufficient to prove direct competitiveness or substitutability.[37] The AB agreed that the beverages were directly competitive or substitutable.[38]

In this example, econometric analysis was no 'objective' silver bullet: it demanded discretion on the part of the dispute settlement bodies, in order to answer questions such as, how much cross-price elasticity was necessary? Which econometric techniques and studies were most reliable? Certainly, given the imperfection of the econometric tools, the dichotomy between subjective and objective should not be too neatly drawn.

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[34] Ibid, AB Report at 25 referencing Panel Report at para. 6.22.
[35] Ibid, Panel Report at para. 4.85.
[36] Ibid at para. 4.82.
[37] Ibid at para. 6.31.
[38] Ibid, AB Report at Section 2(a), para. 56.

However, despite these imperfections, an econometric approach such as this seems to represent the best possible attempt to capture consumer preferences in a way that conforms to the objective approach which the dispute settlement bodies intended. The approach was consistent with a market-based interpretation, translating consumer preferences into competitiveness indices. Assessing consumer preference based upon econometric market data also provides a bottom-up, rather than top-down, approach. Weighing a mass of individual 'votes' about whether products are in competition seems a more democratic strategy than limiting the assessment to the judgment of the dispute settlement bodies. As argued in the previous chapter, the more speculative approaches employed after *Japan – Alcoholic Beverages II,* such as in *Korea – Alcoholic Beverages,* resulted in the widening of the NTP at the expense of regulatory sovereignty.

Yet this approach was also made possible by the fact that consumers were choosing between products on the shelf, and could express their preferences in a quantifiable way. Consumer preferences could be captured through a market-based approach. In this sense, *Japan – Alcoholic Beverages II* forms an illustrative contrast with *EC – Asbestos*.

4. Case study 2: *EC – Asbestos*

A. The dispute

Under Article III(4), Canada challenged an import ban that France had imposed on chrysotile asbestos, as it was a known carcinogen. Rather than imposing a ban, Canada argued France could have instituted special installation and maintenance procedures that would lessen the carcinogenic effect. This would be a less trade-restrictive approach. France defended its ban as a public health protection regulation.

Canada argued that two types of products, its asbestos and France's substitute, were 'like' with respect to all of the BTA criteria.[39] With regard to 'consumer tastes and habits,' they asserted that as the products were not for mass, but instead industrial, consumption, normal consumers found them to be virtually identical. Therefore, there was no reason to differentiate between the two.[40]

[39] Ibid, Panel Report at para. 3.419.
[40] Ibid at para. 3.422.

Following the rationale of the Panel in *Japan – Alcoholic Beverages II*, Canada had also argued that consumer preferences in France were irrelevant, as the import ban altered the normal conditions of competition. Along the lines of *Korea – Alcoholic Beverages*, the AB stated that in such a circumstance, it would be possible for a Member to assess, and submit, information about latent or suppressed consumer demand, or substitutability from a relevant third market.[41]

The EC disagreed that the products were 'like.' With respect to physical characteristics, they pointed out that the smaller diameter of asbestos fibres, a differing physical property, made them carcinogenic.[42] When it came to 'consumer tastes and habits,' however, they dismissed the criterion altogether, as it was only industrial consumers who purchased the product

To resolve the differing claims about the 'likeness' of the products' physical characteristics, the Panel determined that the products must not just be viewed in terms of chemical properties, whose differences might be minute, but also in the context of markets. Thus, they affirmed the market-based approach taken in *Japan – Alcoholic Beverages II*. This approach to 'likeness' in Article III(4) has been broadly accepted.

The Panel did not think that differences in physical characteristics, or the end-uses of the products, were significant enough to differentiate the products.[43] The Panel then stated:

> *We note first of all that the risk of a product for human or animal health has never been used as a factor of comparison by panels entrusted with applying the concept of 'likeness' within the meaning of Article III. In addition to the fact that no other panel has probably ever been called upon to examine a question similar to the one before us, in our view the reason is to be found in the economy of the GATT 1994. Its primordial role is to ensure that a certain number of disciplines are applied to domestic trade regulations. Article XX of the GATT, however, recognizes that certain interests may take precedence over the rules governing international trade and authorizes the adoption of trade measures aimed at preserving these interests while at the same time observing certain criteria.*[44]

This analysis reiterates the *Japan – Alcoholic Beverages II* Panel's rejection of 'aim and effect', as it would replicate the purpose of Article XX. Finally, the Panel concluded that, although the two products were 'like, and therefore the import ban

[41] Ibid, AB Report at para. 123.
[42] Ibid, Panel Report at para. 3.431.
[43] Ibid at para. 8.122.
[44] Ibid at para. 8.129.

violated Article III(4), it did satisfy the conditions of Article XX(b).[45] On this basis, they did not recommend that France remove the ban. Though the AB agreed that the ban could remain, they disagreed with the way that the Panel came to this conclusion; a feature of their disagreement was the Panel's treatment of consumer preferences.

B. How to measure consumer preferences

In *Japan – Alcoholic Beverages II*, while a good deal of attention was given to consumers, in particular as they related to competition, their influence was defined narrowly, in the sense that they were choosing between 'like' products based upon small price differentials in the marketplace. However, in *EC – Asbestos*, consumers did not have market choice. Asbestos is an industrial product, with industrial consumers, so it would be more difficult to obtain the type of data used in *Japan – Alcoholic Beverages II*. The Panel felt that it was too difficult to determine precisely the tastes and habits of consumers in France before the asbestos ban. Also, consumer preferences were inevitably varied. Therefore, the criteria would not provide clear results. They refrained from taking a position.[46]

In fact, based on the impossibility of assessing them in an 'objective' manner, neither Canada, the EC nor the Panel considered consumer preferences to be a compelling aspect of their argument.[47] In a broader sense, this reveals a limitation in approaching consumer preferences through quantitative analysis: it becomes more applicable in certain types of product supply chains.

The AB clarified that the definition of 'like' products should fall in between Article III(2)'s 'like products' and 'directly competitive or substitutable' products.[48] Though the Panel's finding was consistent with *Japan – Alcoholic Beverages II's* objective approach to consumers, the AB criticized the Panel's omission of 'consumer tastes and habits' as a criterion for determining whether the two products were 'like'. Again affirming the *Japan – Alcoholic Beverages II* approach, the AB stated that this criterion was particularly important as Article III dealt with competitive relationships. They stated:

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[45] XX(b) deals with measures 'necessary to protect human, animal or plant life or health'; Marrakesh Agreement Establishing the World Trade Organization, Article XX, 14 April 1994, GATT Secretariat, *The Results of the Uruguay Round of Multilateral Trade Negotiations, the Legal Texts* (Cambridge: Cambridge University Press, 1994) at 455.
[46] *EC – Asbestos* Panel Report, above n. 12, at para. 8.139.
[47] Ibid at paras. 3.419 – 3.431; 8.139.
[48] Ibid, AB Report at paras. 92-96.

*We do not wish to **speculate** on what the evidence regarding these consumers would have indicated; rather, we wish to highlight that consumers' tastes and habits regarding fibres, even in the case of commercial parties, such as manufacturers, are **very likely** to be shaped by the health risks associated with a product which is known to be highly carcinogenic. A manufacturer cannot, for instance, ignore the preferences of the ultimate consumer of its products. If the risks posed by a particular product are sufficiently great, the ultimate consumer may simply cease to buy that product. This would, undoubtedly, affect a manufacturer's decisions in the marketplace.*[49] *[Emphasis added]*

Here, the AB attempted to include consumer preferences in an analysis of competition. As the words 'very likely' demonstrate, it revealed their *interpretation* of consumer preference, particularly as none of the disputing parties had made any claims about it. The interpretation was based on a strong common-sense argument, grounded in international standards and guidelines, that consumers would not want to purchase a substance with known carcinogenic properties.[50] Therefore, unlike the Panel, the AB assumed that consumer preferences *could* be interpreted, in a normative fashion.

But presumably, in Canada, industrial consumers did purchase the product. Neither Canada, nor any of the other disputing parties, had submitted studies on consumer preferences and asbestos to substantiate any claim. The Panel's argument that 'consumer tastes and habits' are varied seems more plausible than the AB's argument, that they are normative. Further, the logic of the Panel is more consistent with *Japan – Alcoholic Beverages II*, and an objective view of consumer preferences. Using this approach, public health concerns are addressed under Article XX, which deals with them explicitly. As the Panel pointed out, they were never introduced into the 'like' products determination itself.

However, there was a problem with the Panel's logic: it created the potential for a legitimacy crisis.[51] By deeming a carcinogenic and non-carcinogenic product 'like,' the Panel appeared insensitive to public health concerns. Their reasoning demonstrated a public relations risk of jettisoning extra-market considerations to Article XX, even in the context of the 'like' products test, when considering regulations with consumer protection objectives.

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[49] Ibid at paras. 103-104.
[50] WHO International Programme on Chemical Safety (IPCS), Environmental Health Criteria 203 – Chrysotile Asbestos (1998), para. 144.
[51] M Howse and E Tuerk, 'The WTO Impact on Internal Regulations — A Case Study of the Canada – EC Asbestos' in G De Burca and J Scott, *The EU and the WTO: Legal and Constitutional Issues* (Oxford: Hart Publishing, 2001) 284 – 321.

The AB were forced to abandon an objective approach to consumer preferences because of these limitations, and adapt a discretionary, subjective, interpretation, which this chapter calls a common-sense approach. However, they did not acknowledge this. After affirming the importance of 'consumer tastes and habits', the AB questioned the Panel's finding that the two products were 'like', but because there was not enough evidence that the products had similar physical characteristics. In so doing, they adopted the EC's argument about differing particle diameter. Then, they interpreted consumer preferences *through* physical characteristics. The different microscopic properties that led one product to be carcinogenic were the basis for consumer's distinction between the products, and thereby made the products uncompetitive.

The AB presented their approach as 'objective'. 'Consumer tastes and habits' were based upon market competitiveness between products, and interpreted in the light of other, more objective BTA criteria of physical characteristics. The AB stated that they did not want to speculate about consumer preferences, but that very speculation seemed to form the substantive justification for the differentiation. Further, considering that many 'like' products differ on a molecular level, their argument about physical characteristics does not seem that rigorous.

While the AB claimed they were evaluating the products based on their competitive relationship, it could easily be argued that their rationale reflected a subjective 'aim-and-effect' approach.[52] The AB raised the point that the dictionary definition of 'likeness' does not specify from whose perspective likeness should be judged.[53] While they did not answer this question explicitly, the subsequent analysis implied that they empowered consumers as arbiters of 'likeness'. Though this analysis argues that what actually occurred was a transfer of discretionary power to the AB, the intent behind this statement, at least apparently, was to transfer the agency from the regulating government to the consumer.[54] Under the 'likeness' test itself, rather than under Article XX, the AB honoured the fact that the aim of the regulation was to protect consumers, even though its effect was to eliminate trade in this product. They thus introduced an extra-market dimension into the 'like' products determination.

[52] Ibid at 301.
[53] *EC – Asbestos,* AB Report, above n. 12, at para. 92.
[54] Howse and Tuerk, above n. 51, at 301.

They also overstepped an important boundary. Findings of fact, based in interpretation of the evidence of the dispute, are the responsibility of the Panel. The AB, on the other hand, is empowered only to make findings of law, derived directly from legal principles. Perhaps the most problematic aspect of this decision is not even that they made a finding based upon no evidence, but that they made a finding of fact at all. However, the AB did not acknowledge this breach. Instead, they finally concluded that, though they would not agree with the Panel that the products were 'like,' there was not enough evidence to prove they were unlike.

As analysed in Chapter 5, the AB has been clear that evidence is not an essential component of determining whether products are competitive and whether a measure discriminates against imported products. In general, this rationale has been used to increase the strength of the NTP at the expense of national sovereignty. Yet in *EC – Asbestos*, the AB concluded that the products would likely not be competitive if consumers had perfect information. Thus the dismissal of evidence was used to provide more deference to national regulation. In this case, the rationale was possibly influenced by the importance of the value at stake, ie, human health.

With regards to consumer preferences, *EC – Asbestos* seems to offer a lose-lose situation. If, following the Panel, consumer preferences are interpreted as 'varied', and therefore irrelevant, there is no basis for incorporating consumer preferences into an important public policy decision. However, when consumer preferences were defined by the AB's discretion, this involved a transfer of power, presented as an 'objective' evaluation of product competition and physical differences. There is a gap between stated approach and the content of the decision. Though the ends were good, from the perspective that they humanized the decision, the means were bad, in the sense that they opened up the potential (which perhaps will never be realized) for a future overstepping of discretion.

In this dispute, a market-bound determination on 'likeness' under Article III had its limitations. Had product 'likeness' been evaluated on the basis of health impacts, rather than product competitiveness, the AB's assessment would have been logical. Horn and Weiler term this an 'alternative comparator' approach.[55] Versions of such an approach have also been proposed by authors such as Regan[56] and Reid.[57] In

[55] Horn and Weiler, above n. 13, at 31.
[56] DH Regan, 'Regulatory Purpose and "Like Products" in Article III(4) of the GATT (with Additional Remarks on Article III(2))' (2002) 36 *Journal of World Trade*, 443 – 478.

fact, the AB explicitly repudiated the Panel's statement that considering health impacts under Article III would nullify the effect of Article XX, stating that 'the fact that an interpretation of Article III:4 … implies a less frequent recourse to Article XX(b) does not deprive the exception in Article XX(b) of *effet utile*'.[58] They made this statement to defend their analysis that negative competition impacts flowed from health impacts, rather than to introduce public health as a factor defining 'likeness'.

This could not be seen as an explicit introduction of Article XX's listed objectives into Article III. Even so, this alternate reading of the AB's decision suggests that it contained an element of balancing between the trade obligations under Article III and the importance of the value at stake. While there was no systematic analysis, this importance may have implicitly influenced their decision.

However, the dispute settlement bodies have resisted measuring 'likeness' using any other baseline than competitiveness. Whether it is used to legitimate or to undermine national regulation, allowing this level of AB discretion in interpreting consumer preferences seems an unsatisfying approach.

The AB Report from the TBT dispute *US – Clove Cigarettes*[59] is significant with respect to the issue of using consumer preference to broaden the 'like' products test. In the report, the AB referenced the treatment of consumer preferences in *EC – Asbestos*. Using this as a precedent, the AB noted that the goals of a measure might be taken into account, in the context of the 'like' products test, 'to the extent they have an impact on the competitive relationship between and among the products concerned'.[60] They summarized their findings as follows:

> *In the light of this context and of the object and purpose of the TBT Agreement, as expressed in its preamble, we consider that the determination of likeness under Article 2.1 of the TBT Agreement, as well as under Article III:4 of the GATT 1994, is a determination about the nature and extent of a competitive relationship between and among the products at issue. To the extent that they are relevant to the examination of certain "likeness" criteria and are reflected in the products' competitive relationship, regulatory concerns underlying technical regulations may play a role in the determination of likeness.*[61]

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[57] E Reid, 'Regulatory Autonomy in the EU and the WTO: Defining and Defending Its Limits' (2010) 44(4) *Journal of World Trade* 877, 891.
[58] *EC – Asbestos,* AB Report, above n. 12, at para. 115.
[59] WTO Panel Report on Measures Affecting the Production and Sale of Clove Cigarettes *(US – Clove Cigarettes)*, WT/DS406/R, adopted 2 September 2011, and Appellate Body Report, WT/DS406/AB/R, adopted 4 April 2012.
[60] Ibid, AB Report at para. 119.
[61] Ibid at para. 120.

While this statement maintains the emphasis on the competitive relationship between products as the decisive factor when determining if products are 'like', it also reinforces the AB's approach in *EC – Asbestos*, which in fact was based upon speculation regarding competitiveness.

This chapter has characterized the rationale employed here as an implicit form of balancing. It is significant that both *EC – Asbestos* and *US – Clove Cigarettes* considered regulations with strong impacts upon human health. This suggests the possibility that human health is a particularly compelling regulatory objective that motivated the AB to tilt the balance toward a greater degree of deference. (Though there have been other trade disputes about cigarettes that have not employed such reasoning, such as *Thailand – Cigarettes*.) Under Article XX, the AB in *Brazil – Retreaded Tyres* agreed with the panel that 'few interests are more 'vital' and 'important' than protecting human beings from health risks'.[62] While the legal context differs, the underlying sentiment remains relevant to the NTP.

5. Case study 3: *US – Tuna II*

US – Tuna II provides an important precedent on the role of consumer preference in the 'like' product test.[63] The following decision was made by the Panel; however, their conclusions were not appealed. Due to its potential for broader applications, it is significant to consider their reasoning. The Panel acknowledged the relevance of consumer preferences, to the extent that they impacted upon the competitive relationship between the products in the marketplace.[64] Yet, significantly, the Panel indicated that the products in dispute were not dolphin-safe versus non-dolphin safe tuna, but rather domestic versus imported tuna. They would not assume that tuna could be considered dolphin unsafe simply because they were Mexican. Further, to the extent that US consumers preferred dolphin-safe tuna, they would do so regardless

[62] WTO Appellate Body Report, *Brazil – Measures Affecting Imports of Retreaded Tyres (Brazil – Tyres)*, WT/DS332/AB/R, adopted 3 December 2007, para 144.
[63] Under the TBT 'necessity' test, Article 2.2, the dispute settlement bodies considered the risk of consumers being misled or deceived by product labeling. This was further discussed in Chapter 3, Section 3.
[64] *US – Tuna II* Panel Report, above n. 10, at para. 7.249.

of the origin of the product. Therefore, they concluded that consumer preference should not modify their conclusion that the products in dispute were 'like'.[65]

The basis for the dismissal of consumer preference in this scenario has implications with respect to the trade and environment relationship more broadly. By extension, for example, consumer preference in a biofuels dispute would also be dismissed. However, the reasoning behind this decision seems flawed. The NTP focuses on the relationship between the 'like' imported and domestic products in dispute as a whole, rather than subsets of those products. Mexico's tuna exports were considered 'like' US domestic tuna. Thus, the product group in question is *all* Mexican tuna. Yet Mexican tuna might be separated into two subgroups: those that qualify for the US dolphin-safe label, and those that do not. At the same time, Mexico argued that all of their tuna was dolphin-safe, though this was measured using different criteria than those adopted by the United States.

The Panel stated that they would not assume that Mexico's tuna were not dolphin-safe; therefore it could not be differentiated, from the perspective of consumers, on the basis of nationality. There are two possible interpretations of the Panel's statement. The first is that that imported and domestic products could not be differentiated because some of the Mexican tuna adopted the US specifications. Another possible interpretation is that the Panel will not pass judgment on Mexican fishing practices as a whole by implying they are unsafe to dolphins.

However, both of these interpretations, as a justification for dismissing consumer preference, are problematic. The first does not make sense with respect to the fact that the product in dispute is all imported Mexican tuna, not simply the subset that adopt the US label. This is self-evident, given that the tuna that adopt the label do not face trade restrictions.

The AB clarified this in general terms in the *US – Clove Cigarettes* AB Report. They stated:

> *Once the imported and domestic like products have been properly identified, Article 2.1 requires a panel dealing with a national treatment claim to compare, on the one hand, the treatment accorded under the technical regulation at issue to* ***all*** *like products imported from the complaining Member with, on the other hand, that accorded to* ***all*** *like domestic products. . . .*[66] *[Emphasis added]*

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[65] Ibid at para. 7.250.
[66] *US – Clove Cigarettes* , AB Report, above n. 57, at para. 193.

The second interpretation is also problematic. Mexico argued that its tuna are dolphin-safe, even if they do not conform to the US label. Yet, the dispute does not consider a broad, abstract category of dolphin-safe tuna. In the context of the 'like' products test, the definition of dolphin-safe tuna is that it qualifies for the label, as this is the regulation in dispute.

Comparison with another dispute helps to illustrate why the legitimacy of the regulatory category is particularly important with respect to environmental regulations. In *EC – Asbestos*, the AB determined that asbestos and its substitutes were 'like' with respect to some of the BTA criteria. However, they questioned whether consumers would prefer carcinogenic asbestos, if they had perfect information about its health impacts. This dispute differed in that the product in dispute was by definition carcinogenic, whereas Mexican tuna is not by definition unsafe for dolphins. For example, if Canada produced non-carcinogenic asbestos, it would not face any barriers to entry to France. With respect to consumers, carcinogenic asbestos and its substitutes can be demarcated more clearly. The tuna example provides more of a gray area.

However, the distinction is somewhat of a false one. The US has established criteria for dolphin-safe, which was at issue in the dispute. It was not part of the Panel's task to assess overall whether tuna from any particular country are dolphin-safe; the dispute rests upon qualification for a particular standard. Thus, dolphin-safe certified tuna might be compared with a Canadian export of non-carcinogenic asbestos substitute: it would not encounter the same trade barrier.

Under TBT 2.1, the AB also consider whether the US definition offers less favourable treatment to Mexican tuna. Therefore, in the context of the 'like' products test, the Mexican product in dispute should be tuna that does not conform with the specifications of the US label. This means that the issue of consumer preference should be relevant; specifically at issue is whether consumers prefer tuna caught without encircling dolphins.

This example is relevant with respect to PPM measures in general. Environmental distinctions such as those between dolphin-safe and unsafe tuna, or sustainable and conventional biofuels, rest upon similar uncertainties about the imported goods as a coherent and separate regulatory category. If a similar position is adopted in all of these disputes, it may automatically disallow domestic consumer

perceptions as a relevant factor in assessing product likeness. In order for consumer preferences to be included, it is necessary that the regulation established by the responding country be seen as constituting in itself a salient category, to which either domestic or imported goods can conform.

The dismissal of consumer preference is particularly surprising as the Panel did consider this issue when establishing whether less favourable treatment had occurred. They stated:

> *We further note that it is undisputed that US consumers are sensitive to the dolphin-safe issue. This is acknowledged by both Mexico and the United States, and is also confirmed by the evidence presented with the amicus curiae brief to which the United States has referred to in its answers to questions. This evidence suggests that, following public campaigning by the environmental organization "Earth Island Institute" in the late 1980s (including through film footage shot in 1987-88 showing the capture and killing of dolphins during a fishing trip where setting on dolphins was used), tuna processors were under pressure to stop purchasing tuna caught in conditions that were harmful to dolphins. The evidence presented to the Panel also shows that major tuna processors reacted to these dolphin-safe concerns, and that this led to changes in their purchasing policies as of April 1990. These policies are still in place: such companies will not purchase tuna from vessels that fish in association with dolphins.*[67]

This paragraph demonstrates that not only do consumers prefer dolphin-safe tuna, they specifically prefer tuna that have not been caught through setting upon dolphins. The Panel further extrapolated that the dolphin-safe label had a commercial value, and that producers actually refused to buy uncertified tuna, for fear of consumer boycotts. Thus, from the perspective of US consumers, dolphin-safe tuna are not 'like' uncertified tuna, as they are not competitive in the marketplace. However, the Panel did not take this into account in the context of the 'like' products test. Instead, they simply argued that the measure had a detrimental market impact on Mexican tuna.

6. Case study 4: 'EU – Biofuels'

If a government were to challenge the EU criteria in the WTO, they would presumably wish to advocate importing biofuels that did not conform to its requirements. Indeed, the establishment of the criteria demarcates certain biofuels as compliant or non-compliant and establishes clear regulatory categories. Whether or

[67] *US – Tuna II* Panel Report, above n. 10, at para. 7.289.

not imported biofuels fit an abstract, general concept of sustainability, the relevant question is if they comply with the specific criteria. Therefore, it seems reasonable to construct the 'like' products analysis based on the difference between conventional and EU-certified sustainable biofuels. Whether the measure is discriminatory should be considered under the less favourable treatment test.

For this reason, the following analysis focuses on 'sustainable' domestic versus 'conventional' biofuels, rather than simply domestic versus imported. However, it is possible that the AB would follow the questionable logic of *US – Tuna II* and dismiss consumer preference in this context.

To analyse the role of consumer preference in an 'EU – Biofuels' dispute, this section reviews the three approaches documented in this chapter, and how they would apply in this dispute: first, objective and quantitative; second, objective and dismissive; and third, common sense.

It should be noted, of course, that this is a very speculative exercise. Not only is the dispute settlement bodies' interpretation in this context unpredictable, but the specific details of the submissions by the Parties would necessarily shape the outcomes. However, without attempting to discern an outcome, this exercise intends to outline some basic contours of the challenge with regard to consumer preferences.

A. The objective approach 1: quantitative measuring

As well as consumer preferences, evaluated econometrically, *Japan – Alcoholic Beverages II* also emphasized the importance of physical characteristics and end-uses of products, when determining whether they are 'like.' The criterion of product end-uses is directly relevant to consumers. To some extent, the criterion of physical characteristics operates in parallel to the consumer preferences query. However, *EC – Asbestos* provided an unusual demonstration of how physical characteristics, in this case molecular differences, might directly influence consumer preferences.

There are physical differences between different types of biofuels. EU biofuels are sourced from temperate-climate feedstocks such as rapeseed, wheat, corn and beets; many imports, on the other hand, come from tropical feedstocks such as palm oil and sugarcane. Also, biodiesel and bioethanol have different chemical properties. If a dispute focused on imported palm oil biodiesel versus domestic wheat ethanol, an argument could be made that these are not 'like' products. However, physical

differences between feedstocks are substantially lessened when biofuels are blended into petrol or diesel. Further, these types of product differences are not substantial; for example, vodka and shochu were considered 'like' even though they are sourced from different feedstocks, due to their similar physical characteristics and end-uses. In a GATT dispute, *US – Superfund*, the Panel determined that crude oil, natural gasoline and refined oil, *inter alia*, were 'like' products despite some physical differences, as they were crude oil products with very similar end uses.[68]

One interesting question is whether the AB would take into account the purpose of sustainability regulation when determining whether the products were 'like'. In *EC – Asbestos*, the AB considered the physical differences between asbestos and its substitutes in the light of the EU's goal of preventing harm to human health. They concluded that the products might not be 'like'. In contrast, physical differences between different types of biofuels have no inherent implications with respect to their sustainability. Instead, the meaningful differences between biofuels for the purposes of sustainability regulation are related to their production process. Even on a molecular level, it would be impossible to distinguish any systematic differences between, for example, palm oil whose production has involved the clearing of virgin forest, and palm oil whose production has not. This suggests that physical differences between biofuels are irrelevant. While the AB adopted this approach in *EC – Asbestos*, in *US – Clove Cigarettes*, they rejected the Panel's argument that determining whether products were 'like' should be informed by the US's policy goal of preventing youth smoking.[69] The justification for the AB's approach in *EC – Asbestos* was the importance of physical characteristics to product 'likeness'; this does not apply with biofuels.

However, even if the AB focused on product competitiveness and disregarded the policy goal at stake, it seems unlikely that they would conclude that the products were not 'like', as discussed subsequently and in the previous chapter. Further, the end-use of bioethanol and biodiesel, regardless of their feedstock, is the same: fuel. In terms of end-uses, sustainable and conventional biofuels would be virtually identical. In *Japan – Alcoholic Beverages II*, Japan argued that consumers drank shochu in a

[68] GATT Panel Report on United States – Taxes on Petroleum and Certain Imported Substances *(US – Superfund)*, L/6175, BISD 34S/136, adopted 17 June 1987, para. 5.1.1.
[69] *US – Clove Cigarettes* Panel Report, above n. 57, at para. 7.182, 7.208 and 7.247, and Appellate Body Report, at para. 108.

traditional way; this type of argument could not be made for biofuels. The dispute settlement bodies did not consider this a persuasive distinction on the part of Japan; they still considered the end-uses to be the same. Regarding end-uses sustainable and conventional biofuels are even more 'like' than, for example, shochu and vodka.

The customs classification code, another BTA criterion for determining whether products are 'like', differs: biodiesel is classified as an industrial good, and bioethanol as an agricultural good. However, neither has a strictly defined code, and the complexity of their classification has led to calls for reform, due to the difficulty with tracking import and export volumes.[70] The complexity also results from the fact that similar products may have different end-uses. For example, bioethanol in modified form may be used for cosmetics, medical sterilization or alcoholic beverages; soybean and palm oil are also cooking oils. Therefore customs classification is not a straightforward basis for clarifying the degrees of similarity between biofuels.

Yet many trade analyses of biofuels sustainability criteria have concluded that products would be 'like' in a trade dispute, due to their physical similarities and end-uses, and the difficulty of arguing that the products would not be competitive.[71]

As discussed throughout this thesis, biofuels, produced sustainably versus conventionally, provide an excellent example of a regulatory distinction based upon non-product related process and production methods ('NPR PPMs').[72] This is particularly true for land-use criteria. Given the 'like' products test's emphasis on physical characteristics and end-uses, there has been some debate about whether two otherwise identical products may be seen as unlike, solely because they are produced differently.[16] This is an important question for environmental regulations in general, as many rely upon such distinctions.

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[70] USDA Foreign Agricultural Service, Global Agricultural Information Network (GAIN) Report Number E36056, 6 April 2006.

[71] *See, eg,* A Swinback, 'EU Support for Biofuels and Bioenergy, Environmental Sustainability Criteria, and Trade Policy', *International Centre for Trade and Sustainable Development, Programme on Agricultural Trade and Sustainable Development,* Issue paper no. 17, June 2009; A Lendle and M Schaus, 'Sustainability Criteria in the EU Renewable Energy Directive: Consistent with WTO Rules?', International Centre for Trade and Sustainable Development ('ICTSD') Information Note No. 2 (2010), http://ictsd.org/i/publications/86798/ (visited 14 November 2011); A Mitchell and C Tran, 'The Consistency of the EU Renewable Energy Directive with the WTO Agreements', Georgetown Law Faculty Working Papers, Georgetown Business, Economics and Regulatory Law Research Paper No. 1485549, October 2009.

[72] Mitchell and Tran, ibid at 3.

[16] Some Member States vigorously oppose the approach of declaring products unlike due to differences in NPR PPMs, On the other hand, in articles that also provide a useful overview of the controversy,

Neither of the disputes analysed herein explicitly addressed the role of NPR PPMs in establishing 'like' products; however, both emphasized the importance of physical characteristics. This functions as a counter-argument to basing product distinctions on NPR PPMs. On the other hand, it has been argued convincingly that the market-based approach to consumer preference established in *Japan – Alcoholic Beverages II,* and emulated in *EC – Asbestos,* resolves some of the environmental shortcomings associated with a reluctance to acknowledge PPM distinctions.[73] This is because, under this approach, if consumers clearly distinguish between identically produced products, so that they are no longer competitive, it forms a strong basis for determining that they are not 'like'. This de-emphasizes aspects of the 'likeness' test related to observable product characteristics and end-uses.

Thus, a greater role for consumer preferences represents a useful evolution in the PPMs debate. However, these consumer preferences will only be significant to the extent that they impact upon the competitive market relationship of the products. Thus, one problem that remains is methodological: how will these preferences be measured? 'EU – Biofuels' illustrates these difficulties. With regard to the econometric approach to consumer preferences, the *Japan – Alcoholic Beverages II* approach contained, in particular, one requirement missing in 'EU – Biofuels': consumer choice. The approach of measuring consumer preferences necessitated data and surveys on purchasing behaviours, which most likely would not exist in this scenario. The supply chain of most biofuels is probably more similar to that of asbestos, in that consumer preferences are not economically explicit. Within Canada, asbestos was purchased by industrial consumers, and installed without end-of-the-line consumers having any say. The same was true for asbestos substitutes in France.

The main consumers for biofuels are also industrial: the companies who purchase them, often blending them with conventional gasoline, and manage their 'at the pump' distribution. It would be unlikely that individual consumers would have much choice between sustainable and conventional biofuels, in either a complaining or a responding country. Small-scale distribution channels might be feasible for some

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both Charnovitz and Howse and Regan argue that, with regard to WTO law, NPR PPM-based distinctions are not necessarily illegal. There is a scarcity of WTO jurisprudence that directly addresses the topic. S Charnovitz, 'The Law of Environmental "PPMs" in the WTO: Debunking the Myth of Illegality' (2002) 27 *Yale Journal of International Law*, 59-110; R Howse and D Regan, 'The Product/Process Distinction – An Illusory Basis for Disciplining 'Unilateralism' in Trade Policy' (2000) 11(2) *European Journal of International Law*, 249-289.

[73] Bronckers and McNelis, above n. 14, at 374 – 378.

types of biofuels, such as recycled cooking oil. However, given the presumed difficulty of sourcing, transporting and delivering fuels on a mass scale, while a separate pump with sustainable biofuel is certainly an option, it seems unlikely as an EU-wide practice. For the same reason, it seems unlikely that econometric data could be drawn from a complainant country.

Given the supply chain, it is certainly possible that the AB would focus their determination of consumer preference at the industrial level. However, despite this limitation, in *EC – Asbestos* the AB made a particular effort to incorporate the potential views of the 'ultimate consumer', though they had little influence over their purchasing choices. This suggests a willingness to consider consumers through a broader definition, in which they more closely resemble 'the public', or, alternately, actors in an idealized market with perfect information. Thus, given that it is a public policy regulation, it is possible that consumers would receive similar treatment in 'EU – Biofuels'.

One important implication of this analysis is that product characteristics, to some extent, determine their regulatory treatment. Biofuels, in particular, seem a very likely candidate for state intervention. A unified delivery infrastructure requires a degree of regulatory involvement at the point of purchase. Rather than the individual or industrial consumer, the state might be deeply implicated in deciding what kind of biofuels to certify and import. This is a significant departure from many existing labelling schemes, such as Fair Trade and Forest Stewardship Council certification, which involve producing goods with superior ethics, as indicated by a label and/or explicit marketing, aimed at capturing a premium market share of alternative consumers. The willingness of consumers to pay more for a product which supports their environmental and social values underwrites the diversification of market choice. These types of voluntary schemes are less likely to violate WTO law. The element of consumer choice is preserved, and there are no restrictions on imports of uncertified or unlabelled goods. The fact that sustainability criteria are being developed by the EU makes them more problematic, from a WTO perspective.

Demonstrating this, in a dispute under Article III(4), the AB stated:

> *… What is addressed by Article III:4 is merely the governmental intervention that affects the conditions under which like goods, domestic and imported, compete in the market within a Member's territory.*[74]

For this supply-chain related reason of lack of market choice, it would likely be difficult to amass data about consumer preferences using market-based surveys or data like those in *Japan – Alcoholic Beverages II*. However, perhaps the notion of 'measuring' consumer preferences might be incorporated through another strategy, which does not rely upon such economically explicit data. An attempt to measure consumer preferences through surveys probably represents the best attempt to capture them objectively. For example, surveys could be administered which queried consumers for their views on sustainable versus conventional biofuels. The emphasis, of course, would be on determining competitiveness between products.

To obtain this information, a survey would have to undertake a fairly nuanced set of questions. If more than half of consumers stated that they would prefer sustainable to conventional biofuels, this would represent a collective consumer preference toward sustainable biofuels. Yet, if consumers said they would prefer sustainable biofuels, would this mean that they would not purchase conventional ones, if they were available, even if they were cheaper? If only conventional biofuels were available, would consumers go further, and boycott these? There is also the problem that this type of data is speculative. Is there a gap between how consumers would respond to such a survey, and how they would act in real life? Also, to use the word of the GATT *Japan – Alcoholic Beverages II* Panel, what if a regulation supporting the use of sustainable biofuels 'crystallized' consumer preference toward these biofuels? Would the presence of the regulation, as it did in *Japan – Alcoholic Beverages II*, invalidate data gathered about consumer preferences? In that case, would the only legitimate data about consumer preferences be gathered from countries which did not offer sustainable biofuels?

B. The objective approach 2: dismissing consumer preferences

In *EC – Asbestos*, the Panel concluded that the products in dispute were 'like,' and then moved on to an analysis of whether the regulation represented less favourable treatment of imported products. Due to lack of evidence, consumer preferences were

[74] WTO Appellate Body Report, Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef *(Korea – Beef)*, WT/DS169/AB/R, adopted 11 December 2000, para. 149.

dismissed as 'varied'. The public policy justifications behind the regulation were considered in the context of Article XX, where they were not evaluated in terms of consumer preferences, per se.

Of course, under *EC – Asbestos*, the Parties in dispute made no claims about consumer preferences. Thus, the Panel had no evidence to go on. Had the Parties undertaken surveys, there would have been more of a rigorous basis for their conclusion. Clearly, whether evidence is submitted is beyond the control of the dispute settlement bodies.

In the event of an 'EU – Biofuels' dispute, it might prove impossible to measure, or interpret, consumer preferences with any degree of accuracy. In this event, one approach would be to follow the Panel in *EC – Asbestos*, and dismiss consumer preferences. In a sense, dismissal is unsatisfying, because it seems to be such an important component of public policy. Undoubtedly, at least some consumers have strong preferences. However, given the similarities between physical characteristics and end-uses of the products, and lack of data on consumer preferences, it would be easy to argue that sustainable and conventional biofuels were 'like', and then undertake the other steps of the analysis.

Based on the example of *EC – Asbestos*, it seems there is another force at work: an intuition as to the degree of controversy the issue will provoke. The emphasis in determining 'likeness' has been product competitiveness. Would consumers really refuse to buy conventional biofuels on a mass scale, making them uncompetitive with sustainable ones? Perhaps, in 'EU – Biofuels,' it would be easier for the dispute settlement bodies to dismiss consumer preferences than in *EC – Asbestos*, as it is less likely to be such a controversial issue.

C. The common sense approach

The example of 'EU – Biofuels' is instructive because it inspires thought about what might happen if a common sense approach is applied in a more ambiguous situation. International standards support the classification of asbestos as a carcinogen, whose use should be eliminated. This made the interpretation of consumer preferences in *EC – Asbestos* fairly unambiguous. The controversial nature of the dispute also influenced the AB to include this consideration under Article III itself, rather than Article XX. The *EC – Asbestos* example clearly demonstrates that, in order to public

backlash, the AB was engaging in a type of balancing between two conflicting goals: achieving trade liberalization, and protecting public health.

On the importance of sustainable production of biofuels, however, targeted international standards are not so well established. For this reason, a common sense interpretation would likely conclude that sustainability is less fundamental than, for example, preservation of human health. An implicit hierarchy of concerns would likely be in operation, which reflected the extent to which the regulations in question reflected broad-based societal norms. If the AB affirmed, for example, that consumers would 'very likely' prefer sustainable to conventional biofuels, and that these preferences would impact upon the marketplace, this argument might prompt more criticism than it did in the *EC – Asbestos* decision.

If the dispute settlement bodies wanted to affirm the legitimacy of sustainability regulations under Article III, and be logically consistent, they would probably need to adopt an 'alternative comparator,' so that the relevant criteria for evaluating product 'likeness' consisted of environmental or social impact. Alternatively, they could explicitly reinstitute the 'aim-and-effect' test.

Of course, there is no way of knowing what the dispute settlement bodies would decide. However, if consumer preferences were to be considered relevant to the dispute, and these preferences were interpreted, rather than measured, this interpretation would grant a large degree of discretionary power to the dispute settlement bodies. To resolve this problem, as the conclusion further discusses, it is important to be clear about what 'consumer preferences' really means.

7. Conclusion

As well as biofuels sustainability criteria, the passage of climate change-related regulations with potential to violate WTO rules provides a fresh opportunity to establish how, precisely, the influence of consumer preferences should be incorporated, particularly in public policy disputes. The issue is important, in the context of the argument that consumer preferences can be used to distinguish between products that would otherwise be seen as 'like', for example, sustainable versus unsustainable, or carbon-intensive versus low-carbon, goods.[75]

[75] Vranes, above n. 7.

Due to the importance of the values they pursue, disputes about public policy regulations, such as climate change measures, are relevant to consumers in a crucial way. This chapter argues that they can become more difficult to capture in these very circumstances. In *EC – Asbestos,* consumer preferences were not measured, in part because the supply chain of the product in the complaining country, and the import ban in the responding country, made gathering data in both places difficult. Yet, they were undeniably relevant. Perhaps because of this conundrum, the AB introduced consumer preference even though it required a contradictory approach. In fact, the AB seemed to employ the same 'subjective' approach to consumers that it had so clearly rejected both in *Japan – Alcoholic Beverages II*, and *EC – Asbestos* itself. This temptation, to use consumer preferences as a stand-in for discretionary action, may recur in disputes that concern public policy regulations.

In such disputes, rather than actual consumers, the interpretation of consumer preferences perhaps should be re-framed: it reflects more about societal norms. Specifically, the more risky and controversial the public threat being forestalled by a tax or regulation is seen to be, the larger the temptation to deal with it under the NTP, rather than Article XX/TBT 2.2, and, in the absence of data, to interpret consumer preferences. In *EC – Asbestos*, the AB argued that they were evaluating consumer preferences based upon competitiveness impacts. However, it is probably more accurate to conclude that norms about protecting human health were universal enough to intrude upon the primary, market-based purpose of the NTP. This suggests elements of the Article XX necessity test, and its evaluation of the importance of the value at stake. This clarification is a step toward a more rational approach. Unavoidably, in a dispute such as *EC – Asbestos*, rather than consumers, the discussion concerns the less market-based concept of 'the public'.

The difficulty with measuring consumer preferences, as documented in *EC – Asbestos*, could be seen as a methodological failure. Canada and the EC could have made their approach to consumers more 'objective' simply by undertaking studies. They might have administered surveys that questioned consumers about their views: did they see asbestos as a serious health threat, even if it was installed using safer procedures? To improve methodologies for capturing consumer preferences, more techniques could be applied, perhaps drawn from other areas, such as Competition Law, which has already developed an arguably more sophisticated approach to

measuring consumer preferences.[76] With evidence to work with, the AB might have used an interpretative strategy as objective as that employed in *Japan – Alcoholic Beverages II*.

Certainly, better methodologies would aid the AB in coming to a more democratic interpretation of consumer preferences. However, one important question remains. Presumably these responses would differ in both countries, based upon the presence, or absence, of a ban. Whose views would be 'objective'? In GATT *Japan – Alcoholic Beverages*, the Panel affirmed that a tax should not *crystallize* consumer preferences. Utilizing the same rationale, the Panel in WTO *Japan – Alcoholic Beverages II* rejected data Japan had gathered about consumer preferences under the conditions of the taxation policy in dispute. The underlying assumption, that government regulation should not influence consumer preferences, is not surprising, given the free market basis of the WTO. When applied to a public policy tax or regulation, however, the extension of this logic has radical implications. It would mean, for example, that consumer views in France, the country with the ban, would not be considered relevant. It would also follow that governments should only establish regulations whose source is measured consumer preferences. This invalidates the argument that governments *should* influence consumer preferences in support of public policy goals. It also suggests that it is the responsibility of consumers, rather than government, to be informed of public health threats such as asbestos.

Despite the lack of homogeneity in the views of consumers, governments routinely make normative regulations. The GATT Panel's insistence that the tax in *Japan – Alcoholic Beverages* should not 'crystallize' consumer preferences is anathema to the fact that, in some instances, government regulation *does* affect consumer preferences. Through setting regulation, such as sustainability criteria, the state influences consumers to adapt to shifting or emerging norms. Regulatory decisions reflect national priorities, and there is certainly no guarantee that they benefit the public. Nor are states impartial guards of the global public good. Their regulatory preferences likely reflect their economic priorities, one factor that makes the dispute settlement bodies' task so difficult. Nevertheless, it is important that the WTO system not act as a braking mechanism for more progressive regulations that

[76] Choi, above n. 1, at 17.

support emerging norms, such as, for example, regulations that support environmental sustainability, or climate change mitigation.

This is particularly relevant in supply chains such as biofuels, where consumers do not select explicitly between products. This is an important subset of regulations to isolate. The elimination of consumer agency means that preferences are necessarily mediated through whoever creates the regulations that govern the production of the product. The issue thus becomes into a broader discussion of environmental norms and values, and their international channels of influence. Clearly, national policies shape norms, and buying sustainable biofuels helps the market for sustainable biofuels.

A greater recognition of the authority of governments to influence consumer preferences seems to call into question the fundamental ideological premise of the WTO: the free market. On the other hand, if we think about the effect on legal reasoning, it can be argued that this recognition does not need to have such a radical impact. There would be factual and legal implications for the Panel and AB, respectively. Factually, the Panel would evaluate evidence obtained within the context of a regulatory regime in dispute. If the hypothesis of government influence on consumer preferences is correct, this would have the impact of providing more WTO legitimacy for these regulations.

Legally, there might be a systematic approach for identifying progressive public policy regulations that merit the allowance of more government discretion. Presumably the first step would be to establish criteria that distinguish these regulations from other types. Given the discretionary range of the AB, there would certainly be room for this within the existing Article III, and it might even clear up inconsistencies between approaches to consumer preferences. The process of establishing criteria, however, could be difficult. For example, a government might present its policy of mandating the purchase *only* of domestic products as an public policy regulation, though it is anathema to Article III. An attempt to create general criteria which successfully addressed these and other problems might be crushed under the weight of its own complexity.

This is particularly true as there is a better established way of approaching essentially the same problem. This is to question whether the NTP should accommodate an aim and effect or 'alternative comparator' approach that would

allow a larger set of concerns to contribute to the 'like' products determination, or whether it should maintain its market-based orthodoxy. It may be that *EC – Asbestos* represents a unique departure on the part of the AB, which was prompted by an extraordinary set of circumstances: the lack of ambiguity in the public policy value at stake (human health), and public pressure to avoid appearing insensitive to such concerns. These factors forced the AB to incorporate non-competitiveness criteria into the 'like' products determination.

On the other hand, shunting such concerns to the category of 'exceptions' under Article XX also might prompt controversy in other situations. If the dispute settlement bodies wanted to adjust their norms, concluding that sustainably-produced and conventional biofuels were not, in fact, 'like', for example, they would need to depart from the approach of *Japan – Alcoholic Beverages II* and *EC – Asbestos*. These disputes take as their foundation the notion that 'like' products are competitive products. When product 'likeness' is measured through competitiveness, it undermines the ability of the dispute settlement bodies to recognize extra-market considerations as a legitimate basis for distinguishing products under Article III, or to allow Member States to do so. If the dispute settlement bodies considered whether sustainability standards for biofuels formed a violation of Article III, an approach which considered only the competitiveness between conventional and sustainably-produced biofuels would likely fail to justify such regulation. If, however, an 'alternative comparator' approach were applied, biofuels could be differentiated because of their differing environmental impact. This determination would *not* rest on an illogical, discretionary interpretation of consumer preferences. Thus, it is a better, more straightforward approach to incorporating non-trade societal norms in the NTP. Alternatively, as suggested in the conclusion of the last chapter, the AB might simply take into account evidence obtained in the context of a regulation in dispute, thus deferring to a government's ability to influence consumer preference. This approach would not rely on any implicit or explicit balancing exercise, but instead would apply across the board to all disputes. This change would necessitate that the AB modify the argument expressed in some disputes that the impacts of the measure in dispute on the competitiveness of the products in question should be dismissed in all circumstances.

Chapter 7

Conclusion

1. Overview

Whether biofuels are sustainable is a central controversy accompanying the expansion in their global production and trade. They have presented a public policy challenge: how to utilize a product that may help prevent climate change but has equal (or even greater) potential to harm. The EU has attempted to respond to this challenge through formulating sustainability criteria to accompany biofuels use targets. These criteria are uniquely well positioned to raise important questions about the relationship between WTO law and national sustainable development policies.

The WTO Secretariat describes sustainable development as a central WTO principle, and it is an objective of the current Doha Development Agenda.[1] Yet the WTO is primarily a trade organization, which circumscribes its contribution. Therefore, an important aspect of the WTO's institutional support for sustainable development is simply non-interference in relevant national policies. For this reason, the WTO-legality of the EU criteria, unprecedented binding 'sustainability' legislation, is a significant question.[2]

While there has been no dispute, this thesis has demonstrated that some of the elements of existing and proposed criteria seem likely not to be in compliance with WTO law, particularly the National Treatment Principle of GATT Article III ('Article III')/TBT Article 2.1 ('TBT 2.1') and GATT Article XX ('Article XX')/TBT Article 2.2 ('TBT 2.2'), the provisions that formed the main focus of this thesis. WTO texts and statements by the Secretariat, as well as relevant international law treaties, have repeatedly affirmed sustainable development's mutual supportiveness with trade liberalization. Yet the EU criteria suggest that sustainable development is far from effortless side-effect of trade liberalization; on the contrary, sustainability regulation poses particularly steep challenges of WTO law.

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[1] *See* Chapter 2.
[2] *See* Chapter 2.

When evaluating the WTO-compatibility of the criteria, a fundamental challenge is to determine if they were crafted in order to protect EU domestic biofuels producers. Legislation to mandate and incentivize renewable energy production may have as its true purpose the protection of domestic biofuels producers. However, the purpose of sustainability criteria themselves does not appear to be protectionism, as argued in this thesis. Instead, these criteria respond to widespread criticism that biofuels are doing more harm than good due to the quantity of agricultural land required for the 'first generation' biofuels currently being produced. As well as displacing food crops and resulting in biodiversity loss, some biofuels produce more emissions than fossil fuels, particularly when land conversion is taken into account. Thus putting in place support mechanisms to encourage biofuels production as an environmental solution *without* attempting to mitigate these environmental harms would have prompted tremendous backlash both from within EU bodies and civil society.[3]

If the criteria are not protectionist in intent, this raises an important question: why do they risk violating WTO law? It is clearly not sufficient for the EU simply to proclaim that trade-restrictive regulation aims to achieve sustainability rather than protect domestic producers; the dispute settlement bodies have developed mechanisms for reviewing this claim. This thesis argues that these mechanisms are not failsafe. In identifying hidden protectionism, they risk also capturing measures that pursue legitimate environmental goals. Further, regulations with particular characteristics are more likely to give rise to this problem; EU criteria exemplify some of these characteristics.

The first part of this conclusion provides a brief, non-comprehensive review of a few of the regulatory characteristics of biofuels sustainability criteria: breadth, process-orientation, extra-territorial impacts, complexity and emergence and supply-chain features. It highlights specific mechanism of WTO law that pose challenges with respect to these regulatory characteristics. This analysis focuses on recommendations for how the AB might adopt a more deferent approach to these issues.

If EU biofuels sustainability criteria are not in conformity because of their regulatory characteristics, this suggests that the WTO has overstepped its role as an

[3] *See* Chapter 1.

organization to prevent trade protectionism. The second part of the conclusion briefly reflects upon two issues that are particularly significant in this regard. The first is the emphasis on international standards and attempted multilateral solutions, a topic which formed a focus of the first part of the thesis. The second is the use of the free market as the baseline for evaluating product competitiveness, a topic considered in the second part of the thesis. In both cases, it is not the WTO provision, but rather its interpretation, that poses a risk of overstepping the WTO's intended role. Finally, the conclusion discusses the important influence of the values that the EU criteria pursue.

2. Key regulatory characteristics of EU biofuels sustainability criteria

A. Breadth

One of the main critiques of sustainable development, both among WTO Members and more widely, is its conceptual breadth and vagueness.[4] EU biofuels sustainability criteria demonstrate this characteristic in that they contain several different regulations grouped under the unifying concept of 'sustainability'. This breadth translates into specific challenges with respect to dispute settlement.[5] In the context of the 'necessity' test of GATT Article XX and TBT 2.2, the AB must assess the contribution of a particular measure to the achievement of the regulatory aim at stake. This suggests it would be possible to discard the concept of 'sustainability' and simply present more narrowly defined regulatory objectives. However, the fact that the regulations pursue sustainability should have some independent influence in this context, as 'sustainable development' is a WTO treaty term. Its legal weight, and whether this may justify trade-restrictive regulation, is not precisely defined. This is an example of a gray area in the interpretation of WTO law. Sustainable development's inclusion in the Preamble of the WTO's founding agreement forms an important aspect of its legal influence in dispute settlement. However, the AB would likely have some flexibility with respect to the amount of weight that they awarded to the WTO Preamble.

Another gray area has to do with the role of social welfare in the WTO's interpretation of sustainable development. The WTO has emphasized economic

[4] *See* Chapter 2.
[5] *See* Chapter 3.

development and environmental conservation.[6] Sustainable development's social welfare dimension might strengthen existing WTO provisions, such as Article XX subparagraphs, that have the potential to apply to national social welfare policies.

Social welfare problems such as higher food prices from biofuels production and corporate 'land grabs' displacing local people have been arguably the most controversial aspect of increased biofuels production. One reason that such impacts were not addressed in the sustainability criteria is likely due to their sheer complexity and the difficulty of addressing them on a producer- by producer- basis. However, the EC also cited WTO law as one reason not to include stronger sustainability criteria.[7] Thus recognition in the WTO that social welfare is an inherent part of the definition of sustainable development would be useful.

B. Process orientation

Another gray area in the interpretation of WTO law is the role of regulatory distinctions based upon how products are produced, so-called process and production methods ('PPMs'), in the WTO provisions considered in this thesis. Questions regarding PPMs are one of the most significant aspects of the EU's regulation. In particular, proposed indirect land use change ('ILUC') criteria demonstrate an extremely deep-reaching form of process-orientation. They do not even respond to the production conditions of biofuels being produced for EU markets, but rather the indirect impact of these biofuels on general production patterns, and resulting land-use change.

EU biofuels sustainability criteria are predicated on the hypothesis that non-product-related ('NPR') PPM-based regulations do not inherently violate WTO law. This demonstrates an evolution in the EU's stance since 2001.[8] Thus a dispute on biofuels sustainability criteria, and particularly ILUC criteria, would provide an important test of the role of NPR PPMs in WTO law.

Process-orientation is also fundamental to the concept of sustainable development. Environmental and social welfare regulations that fall under the umbrella of 'sustainable development' are likely to regulate products differently

[6] *See* Chapter 3.
[7] Ibid.
[8] *See* G De Búrca and J Scott, 'The Impact of the WTO on EU Decision-making', in G De Búrca and J Scott (eds), *The EU and the WTO: Legal and Constitutional Issues* (Oxford: Hart Publishing, 2001), 6 – 11.

based upon how they are produced, rather than their physical differences. In a spectrum of interpretation, acceptance of NPR PPMs as a valid basis for regulatory distinctions would describe the more deferential end.

C. Extra-territorial impacts

The EU has been criticized for setting regulations such as biofuels sustainability criteria which encourage international producers to conform to EU values and standards. Through their criteria, the EU plays a role in shaping global climate change governance. Indeed, their influence on establishing international norms, particularly with respect to social and environmental values, has been the subject of much scrutiny and critique.[9]

Particularly among developing countries, concern about such extra-territorial trade-restrictive measures and their potential to impinge upon national sovereignty is a major source of controversy. Questions arise about what right the EU has to dictate how other countries utilize their natural resources and produce their goods. This is conceptually related to the issue of NPR PPMs: resistance to such process-based regulations results in part from the perception that they intrude excessively into the sovereignty of exporting states. Assessment of compliance with such invisible requirements also necessitates monitoring and overseeing of foreign production on the part of EU Member States.

While biofuels sustainability criteria have extra-territorial impacts, they do not directly impose EU law in other countries; instead they are linked to exports. A country may choose not to export its biofuels to EU Member States if they find that these countries' application of the sustainability criteria is too cumbersome.

Thus, arguments about sovereignty work in both directions. On the one hand, an exporting country has the right to produce products as it wishes; on the other, an importing country has the right to assert its preferences about the goods it imports and

[9] *See, eg,* J Scott and L Rajamani, 'EU Climate Change Unilateralism' (2012) 23(2) *European Journal of International Law, 469 – 494;* KA Nicolaidis and R Howse, 'This is my EUtopia: Narrative as Power' (2002) 40(4) *Journal of Common Market Studies*, 767 – 792; I Manners, 'Normative Power Europe: A Contradiction in Terms?' (2002) 40(2) *Journal of Common Market Studies*, 235 – 258.

consumes domestically.[10] If the EU cannot exclude products produced in a way that it condemns, this also violates its sovereignty.[11]

Whether measures that shape extra-territorial production processes are WTO-compatible also constitutes a gray area that the AB has avoided addressing directly. In general terms, a stricter prohibition on measures with extra-territorial impacts would favour trade liberalization by empowering exporters and pursuing market integration, while allowing such measures in principle would provide more deference to national environmental policies such as EU criteria.

D. Complexity and emergence

Perhaps the most timely and challenging regulatory characteristic of biofuels sustainability criteria is their complexity, and the fact that they pursue emerging norms. To a greater or lesser extent, complexity and emergence are features of sustainability, biodiversity conservation and climate change; biofuels sustainability criteria pursue all three simultaneously. These regulatory characteristics are particularly notable with respect to the criteria that the EU has proposed for responding to ILUC.

Difficulties result from the fact that ILUC is an emerging and controversial problem lacking established scientific credibility and clear international standards. The EU's calculation methodology for determining ILUC emissions may be contested on these grounds. As a result, it would be easier for a country to argue that the methodologies were crafted in order to single out certain (foreign) biofuels for less favourable treatment. Methodological uncertainties may also pose problems in the context of GATT Article XX/TBT 2.2. Uncertainties in the science may cast doubt on the extent to which this approach contributes to the EU's regulatory objective of reducing ILUC-related emissions.

This is significant with respect to climate change and other progressive environmental regulation. At the risk of oversimplifying the complex task of identifying hidden protectionism, in the most general terms, one recommendation would be to focus on the intent and impact of the regulation rather than necessitating

[10] *See, eg,* E Vranes, *Trade and the Environment: Fundamental Issues in International Law, WTO Law, and Legal Theory* (Oxford University Press: Oxford, 2009, 109.
[11] R Howse and D Regan, 'The Product/Process Distinction – An Illusory Basis for Disciplining 'Unilateralism' in Trade Policy' (2000) 11(2) European Journal of International Law, 275.

that it is based upon international norms or multilateral agreements. If a regulation also has a negative impact on domestic producers, for example, this offers an evidence-based argument that its intent is not protectionist. When evaluating the importance of a regulation, scientific evidence plays an indirect role, particularly in TBT Article 2.2; the nature of this influence is not well defined and seems open to interpretation. Therefore it would be possible to adopt an approach to scientific evidence that was informed by a precautionary approach.

E. Integrated supply chain

Biofuels sustainability criteria walk the line between voluntary and mandatory, containing elements of both. While the EU has been careful to affirm that the criteria themselves are non-binding, biofuels must fulfil the criteria to count toward renewable energy targets that *are* binding; thus Member States may feel compelled to apply the criteria in order to meet this requirement. The criteria themselves contain some flexibilities regarding how they are fulfilled; however, the EU will also undertake conformity assessment of alternative approaches.

The EU's emphasis on the criteria's voluntary nature (as demonstrated by their position that the TBT Agreement does not apply to the criteria for this reason) reflects the fact that voluntary criteria are more likely to conform to WTO law. From a WTO perspective, the least problematic means for regulating biofuels would be through no government intervention whatsoever, relying solely upon consumer choice. Disputes such as *Korea – Beef* and *US – Tuna II* have clarified this; the Panel in *US – Tuna II* stated that the WTO deals with 'governmental intervention that affects the conditions under which like goods, domestic and imported, compete in the market'.[12]

However, it would be difficult or impossible for consumers to choose between 'sustainable' and 'conventional' biofuels at the pump, as they choose between organic and conventional apples. Biofuels are delivered through unified infrastructure, and often blended with petrol. These supply chain constraints mean that consumers will likely not make the ultimate choice of which biofuels they would prefer to purchase. It is important to view the EU's regulatory strategy in the light of these limitations. Inherent constraints shaped by the supply chain may make the regulation less likely to comply with WTO law.

[12] Ibid.

Conceptually, this example reveals why, in some sectors in particular, national regulation may be the most appropriate response to a particular environmental problem. These constraints should also be relevant when evaluating the reasonable availability of other regulatory options in the context of the 'necessity' test of Article XX and TBT 2.2. The AB should clearly note the fact that less trade restrictive voluntary regulation is not reasonably available.

3. Establishing the limits of WTO obligations

The interpretation of WTO provisions should reflect the fact that the WTO is a negative integration instrument whose function is limited to preventing Members from using domestic policies to erect undue trade barriers, rather than a positive integration instrument that harmonizes national policies. Dispute outcomes repeatedly affirm that WTO obligations maintain a high level of deference to individual national sovereignty; for example in *EC – Asbestos* the AB stated that Member States have an 'indisputed' right to 'set the level of protection they wish to achieve'.[13] However, some WTO dispute settlement resolution mechanisms shape national policies so that they conform more closely with international market integration objectives. This section identifies two areas of interpretation that pose a particular risk in this regard.

A. International standards and multilateral harmonization

The first area is the role of the WTO in encouraging international and multilateral regulation. The TBT Agreement is particularly important in this respect. The TBT Agreement's Preamble recognizes 'the important contribution that international standards and conformity assessment systems can make [to furthering the objectives of GATT 1994] by improving efficiency of production and facilitating the conduct of international trade. . . .'[14] Thus, the Agreement contains a number of provisions that encourage Member States to harmonize their regulation with international standards

[13] WTO Panel Report, European Communities – Measures Affecting Asbestos and Asbestos-Containing Products *(EC – Asbestos)*, WT/DS135/R, adopted 18 September 2000; and Appellate Body Report, WT/DS135/AB/R, adopted 12 March 2001, para. 168.
[14] Agreement on Technical Barriers to Trade ('TBT Agreement'),14 April 1994, GATT Secretariat, *The Results of the Uruguay Round of Multilateral Trade Negotiations, the Legal Texts* (Cambridge: Cambridge University Press, 1994) 122.

and with one another.[15] The importance of the TBT Agreement's emphasis on international standards in contributing to the WTO's positive integration function has been noted, for example, by Ortino[16] and Scott.[17] Due to constraints of space and time, a full investigation of all of these provisions and biofuels sustainability criteria must remain a topic for future research.

This thesis focused on elements of this emphasis on international standards in Article XX and TBT 2.2. To review briefly, in the 'necessity' test of these provisions the dispute settlement bodies must establish the causal connection between measure and regulatory goal; in the GATT dispute *Thailand – Cigarettes* the Panel cited a resolution of the World Health Organization to demonstrate that Thailand's ban on cigarette advertising was linked to its goal of reducing smoking.[18] Similarly, in *EC – Asbestos* the Panel cited WHO statements about the carcinogenicity of asbestos to affirm the connection between France's ban and its objective of protecting human health.[19] Another component of the 'necessity' test under Article XX is an assessment of the importance of the value at stake. In *Brazil – Tyres*, the AB called upon relevant international agreements and international standards to prove the importance of Brazil's public health objectives.[20]

One justification for this emphasis on international standards is to avoid unilateral measures. The concern is that enabling such measures would lead to the failure of the international trade system, as national governments would simply proliferate measures that conditioned access to their markets upon particular regulatory requirements.[21] In this context, the AB has also emphasized the importance

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[15] *See, eg,* TBT Articles 2.4, 2.5, 2.6, 2.7, 2.9, 5.4, 5.5, 5.6, 6.1, 9.1, 12.4, 12.5, 12.6; Ibid.
[16] F Ortino, *Basic Legal Instruments for the Liberalisation of Trade: A Comparative Analysis of EC and WTO law* (Oxford: Hart Publishing, 2004) 26.
[17] J Scott, International Trade and Environmental Governance: Relating Rules (and Standards) in the EU and the WTO (2004) 15(2) *European Journal of International Law* 307, 328 – 330.
[18] GATT Panel Report on Thailand – Restrictions on Importation of and Internal Taxes on Cigarettes *(Thailand – Cigarettes)*, DS10/R – 37S/200, adopted 7 November 1990, para. 78.
[19] EC – Asbestos, Panel Report, above n. 11, at para. 8.188.
[20] WTO Appellate Body Report on Brazil – Measures Affecting Imports of Retreaded Tyres *(Brazil – Tyres)*, WT/DS332/AB/R, adopted 3 December 2007, paras. 21, 121.
[21] See, eg, US – Shrimp: *…if an interpretation of the chapeau of Article XX were to be followed which would allow a Member to adopt measures conditioning access to its market for a given product upon the adoption by the exporting Members of certain policies, including conservation policies, GATT 1994 and the WTO Agreement could no longer serve as a multilateral framework for trade among Members as security and predictability of trade relations under those agreements would be threatened…market access for goods could become subject to an increasing number of conflicting policy requirements for the same product and this would rapidly lead to the end of the WTO multilateral trading system*. WTO Appellate Body Report on United States – Import Prohibition of Certain Shrimp and Shrimp Products *(US – Shrimp)*, WT/DS58/AB/R, adopted 15 June 2001.

of attempting negotiation and providing regulatory flexibility to account for the diverse circumstances of trade partners. In *US – Shrimp*, the AB's finding that the measure violated Article XX had to do with its unilateral nature. This ruling is significant as the AB not only stipulated the need for more multilateral coordination, but also suggested the introduction of particular procedural elements that should be incorporated into the regulatory processes.[22]

The implication is that EU biofuels sustainability criteria are most likely to be considered in compliance if they refer to internationally recognized sustainability standards that have been established in consultation with trade partners and/or based in multilaterial agreements, and if the process of their formulation exhibits inclusiveness and procedural fairness.[23] Thus, one likely influence of WTO law on the EU regulation was to encourage the utilization of international standards as benchmarks. The criteria tie EU requirements to international standards as they are relevant, for example, when defining areas of high biodiversity.[24] They also state the EU's openness to negotiated solutions with trade partners.

These requirements enable governments to ground sustainability-based trade restrictions in international norms, which are transparent, legitimate and objective. Yet focusing on international standards, multilateralism and negotiation may have negative side-effects. The legitimacy of emerging standards and agreements is uncertain, while existing, more general agreements might be too broad to apply. This emphasis also exerts pressure not to go beyond international benchmarks. International consensus is a force for weaker and more general standards. Thus, even though they appear to be as impartial as possible, these requirements risk being a braking mechanism on progressive regulation. Emerging environmental problems might require a national regulatory response that runs ahead of the timeline of the multilateral response which may be slow and inadequate. Thus, there is a double-edged sword for emerging environmental regulations. While the international system

[22] In his analysis of this dispute, Ortino characterized the AB's ruling as demonstrating a positive normative function, as the AB explained where the regulation had failed and how the failure should be remedied. He stated, 'it is the clear attempt to put forward certain normative criteria and standards which Members must and can follow in regulating their markets that characterizes the AB Report….' Ortino, above n. 13, at 238; *see also* De Búrca and Scott, above n. 9, at 20.
[23] R Howse, et al., 'WTO Disciplines and Biofuels: Opportunities and Constraints in the Creation of a Global Marketplace' (2006) IPC Discussion Paper, International Food and Agricultural Trade Policy Council, 13.
[24] *See* Chapters 3 and 4.

has not formulated a response (or may not formulate an adequate response), unilateral national regulation may be disciplined by the WTO.

B. The role of evidence

The AB has rejected sole reliance on market evidence when establishing the existence and nature of the competitive relationship between products in dispute. In the context of the 'like' products test of the National Treatment Principle, one of the main arguments is that the measure in dispute may distort the competitive relationship between products by changing the relationship between consumers and the products.

The argument for dismissing an evidence-based approach was initially applied in disputes regarding the impact of tax measures on the price and availability of imported alcoholic beverages.[25] However, extending this rationale to include public policy regulations allows a deeper examination of the underlying premise that government regulation distorts competitive relationships. Under this approach, if biofuels sustainability criteria led EU consumers to develop a preference for sustainable biofuels, to the extent that conventional biofuels were no longer competitive in EU markets, this would not be a valid basis for determining that the products were not 'like'. Instead, the AB would only take into consideration consumers whose market preferences had not been so distorted.

This prompts thought on the complexity of the relationship between government policy and the free market, particularly with respect to public policy regulation. Specifically, it may be appropriate in some cases for government regulation to play a role in determining the competitive relationships between products in the marketplace. In this instance, dismissing this influence as distorting intrudes too much into government sovereignty. Indeed, in the broadest terms, this may be a question about which is more legitimate in shaping product competitiveness, government regulation or the free market.

This issue also has pragmatic significance with respect to regulations that respond to emerging problems. It may be in part the responsibility of governments to encourage consumers to adopt new behaviours such as purchasing sustainable biofuels. Thus dismissing such views exhibits an excessive bias toward the free

[25] WTO Panel Report on Korea – Taxes on Alcoholic Beverages *(Korea – Alcoholic Beverages)*, WT/DS75/R; WT/DS84/R, adopted 17 September 1998, and Appellate Body Report, WT/DS75/AB/R; WT/DS84/AB/R, adopted 18 January 1999.

market. The obvious recommendation would be to take into consideration evidence collected in the context of a regulation in dispute, which enables a more balanced approach.

4. Influencing the spectrum of interpretation: The importance of the value at stake

AB decisions do not happen in a textual vacuum; they reflect larger political issues. In the event of a WTO dispute, the importance of the values that this regulation pursues would be significant with respect to the legitimacy of the AB's ruling. For this reason, it may be difficult to separate the legal and political issues that this case study raises. As noted, one political issue of central importance has to do with the relationship between developing and developed countries with respect to both agricultural market protectionism and environmental regulation. In both cases, biofuels sustainability criteria may be controversial based upon the perception that the EU is protecting its markets and imposing its sovereign values.

This helps explain why international standards are useful. If an international regulatory response has been imposed, this provides a baseline against which to measure divisive differing national regulatory responses. Yet EU biofuels sustainability criteria aim to achieve goals whose relative importance is uncertain both in the WTO context and also in international law more broadly. This uncertainty is a dynamic factor; it adds to uncertainty about the criteria's WTO-compatibility. The AB's ruling in a hypothetical 'EU – Biofuels' dispute would reveal something about the pervasiveness of the norms they attempt to achieve.

The importance of the value at stake plays a formal role in adjudicating WTO disputes; for example, the AB considers this importance when determining the necessity of a measure under Article XX or TBT 2.2. Yet examples throughout this thesis also suggest the policy goals at stake may play a role in determining the outcome of disputes in broader more implicit ways. This is a controversial conclusion. In theory Member States can pursue whatever goal they wish to achieve, and the AB does not make pure tradeoffs between trade liberalization versus other values. When assessing compliance with the NTP the AB does not consider the weight of the policy objective that a Member State pursues; instead it focuses on determining whether a

measure is discriminatory based upon its structure and application. Even when evaluating the importance of the value at stake in the context of Article XX/TBT 2.2 necessity test, the AB avoids judging the merit of the goal but instead assesses the appropriateness of the means/ends relationship between the goal and the measure.

This thesis has argued that pure balancing may have played a role in past disputes under the NTP. For example, in *EC – Asbestos*, the AB used competitiveness impacts as a proxy for their sense that human health was of paramount importance to the 'likeness' of the products. This constituted a 'finding of fact' on the part of the AB, as none of the parties in dispute had submitted any evidence about consumer preference. Thus the ruling suggests an element of balancing between trade obligations and the importance of the value at stake.

The AB report from the TBT dispute *US – Clove Cigarettes* affirmed the AB's interpretation of this issue in *EC – Asbestos*. In a carefully worded statement, they concluded that underlying regulatory concerns might play a role in the determination of likeness if they are relevant to the 'likeness' criteria and reflected in the competitive relationship between products in dispute.

It is significant that in both of these decisions, the value at stake was public health. As the AB in *Brazil – Retreaded Tyres* affirmed, human health is of utmost importance.[26] The gravity of the regulatory goal that a measure in dispute pursues, and the level of controversy that may result from a ruling that it is not in compliance, may guide the AB in this context.

Further, in some disputes, the AB has considered simply whether there is a negative impact upon conditions of competition to the detriment of imported products; if so the measure in dispute is not in conformity. In others, they have introduced an additional step of considering if this detrimental impact may be explained by factors other than the foreign origin of the product (Article III) or 'legitimate regulatory distinctions' (TBT Agreement). The latter approach is more deferent, as a measure may have negative impacts upon imported products and still be in conformity.

Yet they have not specified the criteria that determine the approach. In general, disputes in which they adopted this more deferential approach have had to do with public policy regulations that may raise controversy if the AB rules that they do

[26] *Brazil – Tyres,* above n. 17, at para. 144.

not conform to the NTP (ie *EC – Asbestos*, *US – Clove Cigarettes*, *US – Tuna II*). This suggests the possibility that the importance of the value at stake has some implicit influence. For example, public health measures are of primary importance; taxation measures that distinguish between alcoholic beverages are not so important.

5. Conclusion

The regulatory characteristics of EU biofuels sustainability criteria exemplify the issues that they attempt to regulate. The criteria's breadth, complexity and process-orientation, their extra-territorial nature, as well as the fact that they respond to emerging problems, mirror the relevant global environmental challenges. Thus the relationship between these ambitious criteria and WTO law helps illustrate more broadly the challenges such regulations may pose in the WTO context.

The WTO AB is not the primary instrument of competence with regard to the environment, nor should it be responsible for evaluating the legitimacy or importance of environmental regulation. Yet WTO law should provide appropriate deference to national regulation. If regulations are disciplined because they exhibit particular characteristics, rather than as a response to their protectionist nature, the WTO will have overstepped its bounds as a negative integration instrument. Some mechanisms to identify hidden protectionism have in some instances played a larger function: multilateral harmonization of regulation to enable trade liberalization.

The text of WTO covered Agreements is not sufficient to make self-evident whether a measure is in compliance. The discretionary element is of key importance. Many of the same interpretive strategies that have the potential to overstep the WTO's negative integration mandate fall into a gray area of WTO law. Declaring the EU criteria to be WTO-compatible would necessitate an interpretation of these gray areas that is maximally deferent to the EU. A more deferential approach seems appropriate with respect to the WTO's scope and function.

Yet AB decisions must also be viewed in the context of larger WTO debates and the political force of public opinion. The values that the criteria pursue have indeterminate legal weight and attempts to forge international solutions are beset by controversy. Thus, the WTO dispute settlement system may be playing a role in balancing not only national policy objectives against WTO commitments, but also the

importance of innovative regulation against international consensus. The EU criteria reveal some of the tensions that lead to the relevant gray areas in WTO law, and the implicit and explicit factors that shape the AB's decision of how to strike the balance.

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